

Exhibit E

Part 3

d) a computer having a database containing the locations of all packages in the holding means able to receive orders for packages and able to direct the means for picking packages.

25. A system as described in claim 24 wherein the structure includes a plurality of rod supports from which the rods extend, said structure with back rod supports form an X, Y coordinate system with each rod and medicine packages therein having a unique X and Y coordinate, said picking means disposed adjacent said structure such that a given medicine package on an associated rod can be picked by the picking means to fill a patient's prescription; or a given medicine package in the supplying means can be picked by the picking means to restock the associated rod.

26. A system as described in claim 25 including a conveyor in communication with the picking means; and patient prescription boxes which are moved by the conveyor to the picking means such that the picking means provides the medicine packages it has picked to fill a given prescription to an associated box.

27. A system as described in claim 26 wherein the picking means includes at least one gripper that picks the medicine packages; and a tooling support structure having at least one column to support the tooling and at least one row to

~~support the column such that the tooling moves along the column~~
 as the column moves along the row to pick a given medicine
 package hanging from a corresponding support rod, or restock a
 given medicine package on a corresponding support rod; and means
 for moving the column with respect to the row, said moving means
 controlled by the computer.

28. A system as described in claim 27 wherein the
 tooling is comprised of

a housing;

means for storing medicine packages attached to the
 housing;

means for obtaining a medicine package, said
 obtaining means slidably attached to the housing such
 that it can move in a Z direction, which is perpendicular
 to the X and Y directions, to pick a medicine package
 from a support structure when the housing is adjacent to
 and aligned with a support rod, and can move in the Z
 direction to place a picked package on the storing means;
 and

wherein the identifying means is part of the gripper
 such that it can identify a package to be picked by the
 obtaining means, each of said packages having an identity
 disposed on them which can be read by the identifying
 means.

~~29. A system described in claim 28 wherein the identity~~
of each package is a bar code, and the identifying means includes
a bar code reader disposed on the obtaining means.

30. A system as described in claim 29 wherein
the obtaining means includes means for producing a
suction; a suction rod in fluidic connection with the
suction producing means, said suction rod slidably
attached with respect to the Y and Z directions to the
housing and maintaining a suction therethrough when the
suction producing means is activated;

a suction is connected to the suction rod through
which a medicine package is picked with suction; and
means for sensing when a package is properly positioned
on the suction head such that the package rod is then
moved to the storing means and deposits the package
thereon.

31. A system as described in claim 30 wherein the
storing means is a storing rod which extends from the housing
such that the suction head and the suction rod can deposit a
package thereon.

32. A system as described in claim 31 wherein the
tooling includes valves and pneumatic cylinders for moving the
suction rod in the Y and Z direction; and a vacuum pump for

~~providing suction to the suction rod and support head sufficient to pick a package from a rod of the support structure and then hold it to the suction head.~~

33. A system as described in claim 32 wherein the suction head has two faces through which a suction can be drawn, each face capable of picking a package.

34. A system as described in claim 33 wherein the two faces are parallel to each other and are parallel to the x-axis, and wherein each package has a face and the package are held by the storing rod and the rods of the support structure such that the face of each package is parallel to the x-axis.

35. A system as claimed in claim 24 wherein the rods extend from the back rod supports in sets of two, with a first rod and a second rod on each set pointing essentially in a Z direction, which is perpendicular to the X and Y directions, but approximately 180° apart from each other, and wherein the picking means includes a first gripper and a second gripper that picks the medicine packages; and a first and second tooling support structure, each tooling support structure having at least one column and at least one row to support the column, such that the first and the second tooling moves along the respective column and the respective column moves along the respective row of the first and second tooling support structure, respectively, to pick

~~a given medicine package from a corresponding support rod, or
restock a support rod with an associated medicine package.~~

~~sub
a4~~ 36. A system as described in claim 20 wherein the
picking means includes at least one gripper that picks the
packages; and a tooling support structure having at least one
column to support the tooling and at least one row to support the
column such that the tooling moves along the column as the column
moves along the row to pick a given package hanging from a
corresponding support rod, said gripper able to turn on the
column to pick packages on either the first or second holding
means; and

~~means for moving the column with respect to the row, said
moving means controlled by a computer and in communication
therewith.~~



871832

ABSTRACT OF THE DISCLOSURE

A system for filling orders, such as prescriptions for patients, comprising a device for holding packages. Each package
5 has the same type of contents being held in a predetermined location by the holding device. Each package has an identity which defines the contents therein. The holding device has a plurality of predetermined locations corresponding to a plurality of different types of contents. Additionally, the system is
10 comprised of a device for supplying packages to the holding device. Also, there is a device for picking a package from the holding device that is identified in the order for the purpose of restocking the holding device. The picking device is in communication with the holding device and supplying device. In a
15 preferred embodiment, the contents of each package is a single dosage of medicine.

Docket No. 920015

DECLARATION AND POWER OF ATTORNEY

I, the below named inventor, hereby declare that:

My residence, post office address and citizenship is as stated below next to my respective name.

I believe I am the original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled
the specification of which is attached hereto.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing of this application.

| <u>Application Serial No.</u> | <u>Filing Date</u> | <u>Status</u> (Patented, Pending, Abandoned) |
|-------------------------------|-----------------------------|-------------------------------------------------|
| <u>07/469,217</u> | <u>1/24/90</u> | <u>Pending</u> |
| <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> |
| <u> </u> | <u> </u> | <u> </u> |

I hereby declare that all statements made hereby of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorney(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith: Lynn J. Alstadt, Reg. No. 29,362; George P. Baier, Reg. No. 26,717; Paul A. Beck, Reg. No. 22,289; Michael L. Dever, Reg. No. 32,216; Gordon Harris, Reg. No. 15,384; George Raynovich, Jr., Reg. No. 19,829 and Alvin E. Ring, Reg. No. 18,697.

Address all telephone calls to Lynn J. Alstadt
Address all correspondence to Buchanan Ingersoll Professional Corporation,
56th Floor, 600 Grant Street
Pittsburgh, Pennsylvania 15219-
(412) 562-1632

1-00
 Full name of sole or first inventor Sean C. McDonald
 Inventor's Signature *Sean McDonald* Date 4/20/92
 Residence Pittsburgh, Allegheny County, Pennsylvania PA Citizenship USA
 Post Office Address 419 South Braddock Avenue, Pittsburgh, Pennsylvania 15221

Full name of second joint inventor, if any Ellen J. Hertz
 Inventor's Signature _____ Date _____
 Residence Clemmons, Forsyth County, North Carolina Citizenship USA
 Post Office Address 4232 Lake Cliff Drive, Clemmons, North Carolina 27012

3-00
 Full name of third joint inventor, if any James A. Smith
 Inventor's Signature *James A. Smith* Date 4/20/92
 Residence Allison Park, Allegheny County, Pennsylvania PA Citizenship USA
 Post Office Address 3909 Ash Drive, Allison Park, Pennsylvania 15101

Full name of fourth joint inventor, if any Gregory Toto
 Inventor's Signature _____ Date _____
 Residence Santa Cruz, Santa Cruz County, California Citizenship USA
 Post Office Address 815B Corcoran Avenue, Santa Cruz, California 95062

Full name of fifth joint inventor, if any _____
 Inventor's Signature _____ Date _____
 Residence _____ Citizenship _____
 Post Office Address _____

Applicant or Patentee: Sean C. McDonald et al.Attorney's Serial or Patent No.: _____ Docket No.: 920015

Filed or Issued: _____



AN AUTOMATED SYSTEM FOR SELECTING AND DELIVERING PACKAGES FROM A STORAGE AREA

VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) and 1.27(c)) - SMALL BUSINESS CONCERN

I hereby declare that I am

☐ the owner of the small business concern identified below:
☒ an official of the small business concern empowered to act on behalf of the concern identified below:
NAME OF CONCERN Automated Healthcare, Inc.ADDRESS OF CONCERN 261 Kappa DrivePittsburgh, Pennsylvania 15238

I hereby declare that the above identified small business concern qualified as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention, entitled AN AUTOMATED SYSTEM FOR SELECTING AND DELIVERING PACKAGES FROM A STORAGE AREA by inventor(s) Sean C. McDonald, Ellen J. Hertz, James A. Smith and Gregory Toto

described in

☒ the specification filed herewith
 application serial no. _____, filed _____
 patent no. _____, issued _____

If the rights held by the above-identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who could not qualify as a small business concern under 37 CFR 1.9(d) or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e). *Note: Separate verified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

NAME _____

ADDRESS _____
☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

NAME _____

ADDRESS _____
☐ Individual ☐ Small Business Concern ☐ Nonprofit Organization

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

NAME OF PERSON SIGNING Sean C. McDonaldTITLE OF PERSON OTHER THAN OWNER PresidentADDRESS OF PERSON SIGNING 261 Kappa DrivePittsburgh, Pennsylvania 15238SIGNATURE Sean McDonald DATE 4/20/92

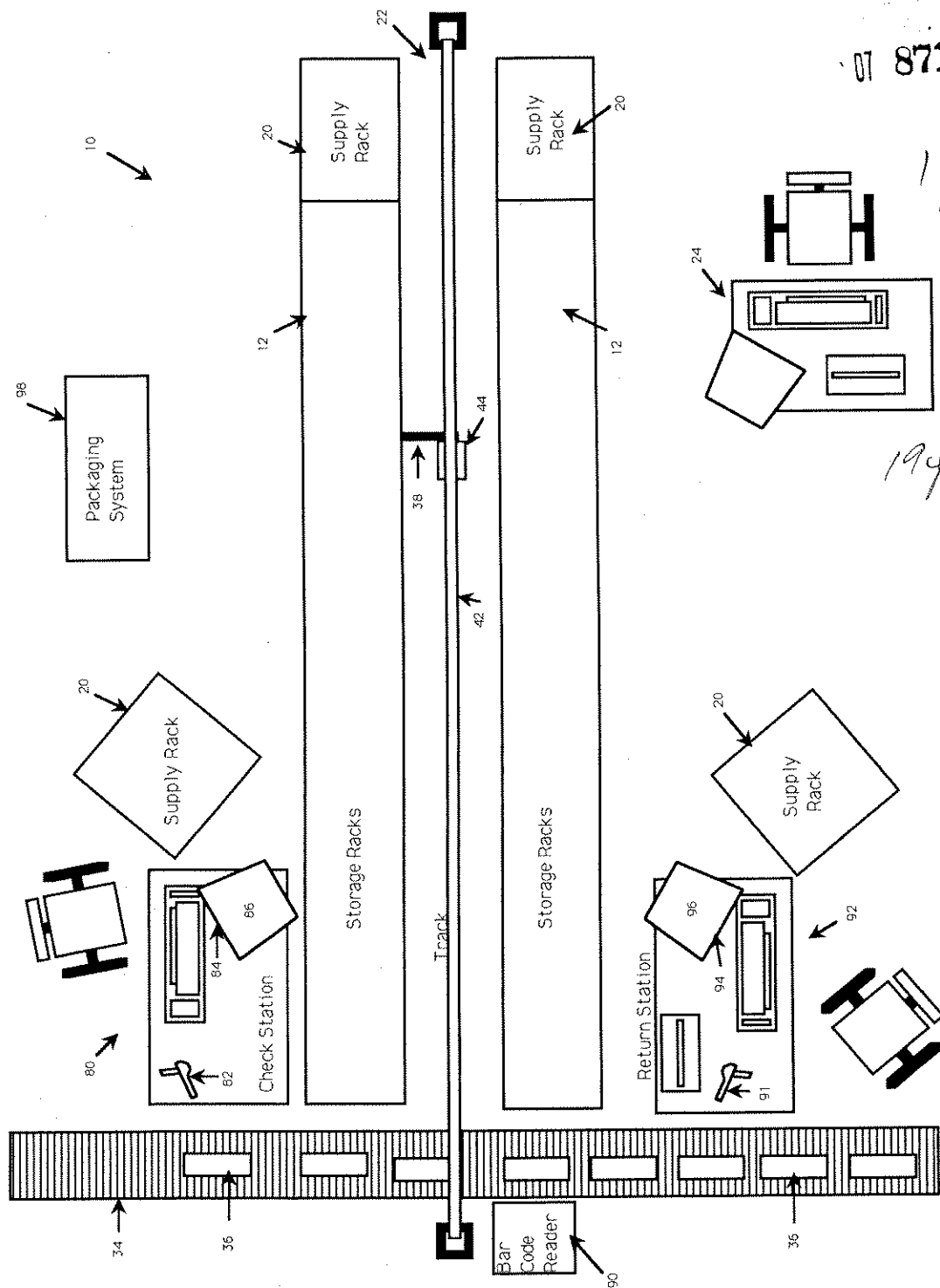


Figure 1

07 871832

1/19

19 flip

| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

295495

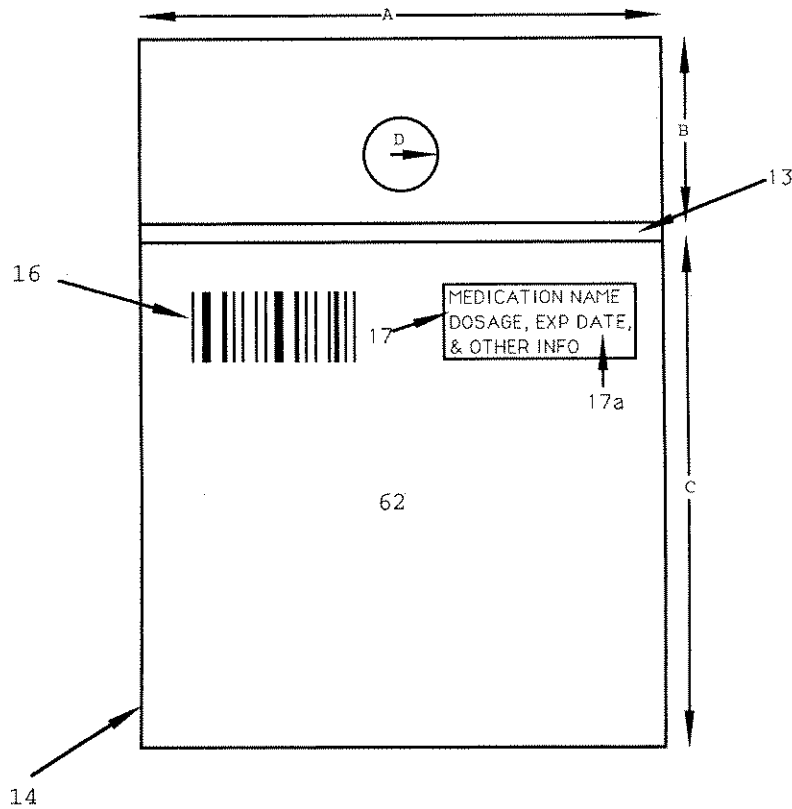


Figure 2

| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DEAFISMAN | | |

295495

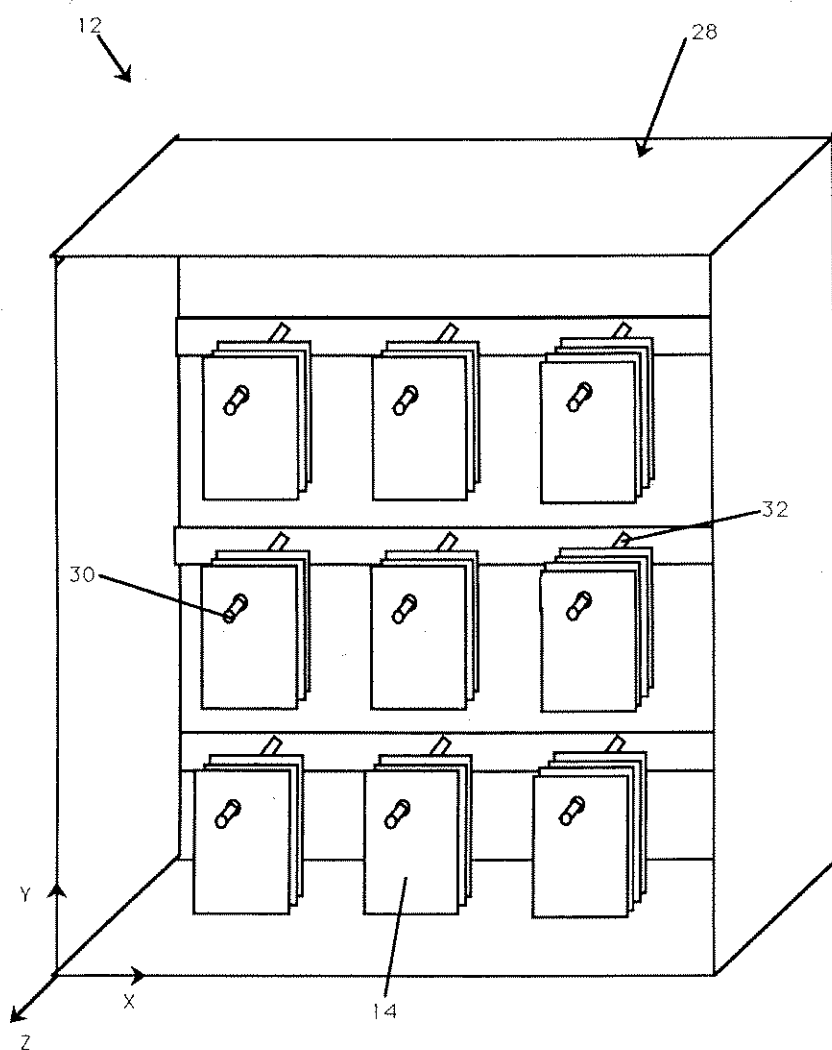


Figure 3

| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| CRAFTSMAN | | |

295495

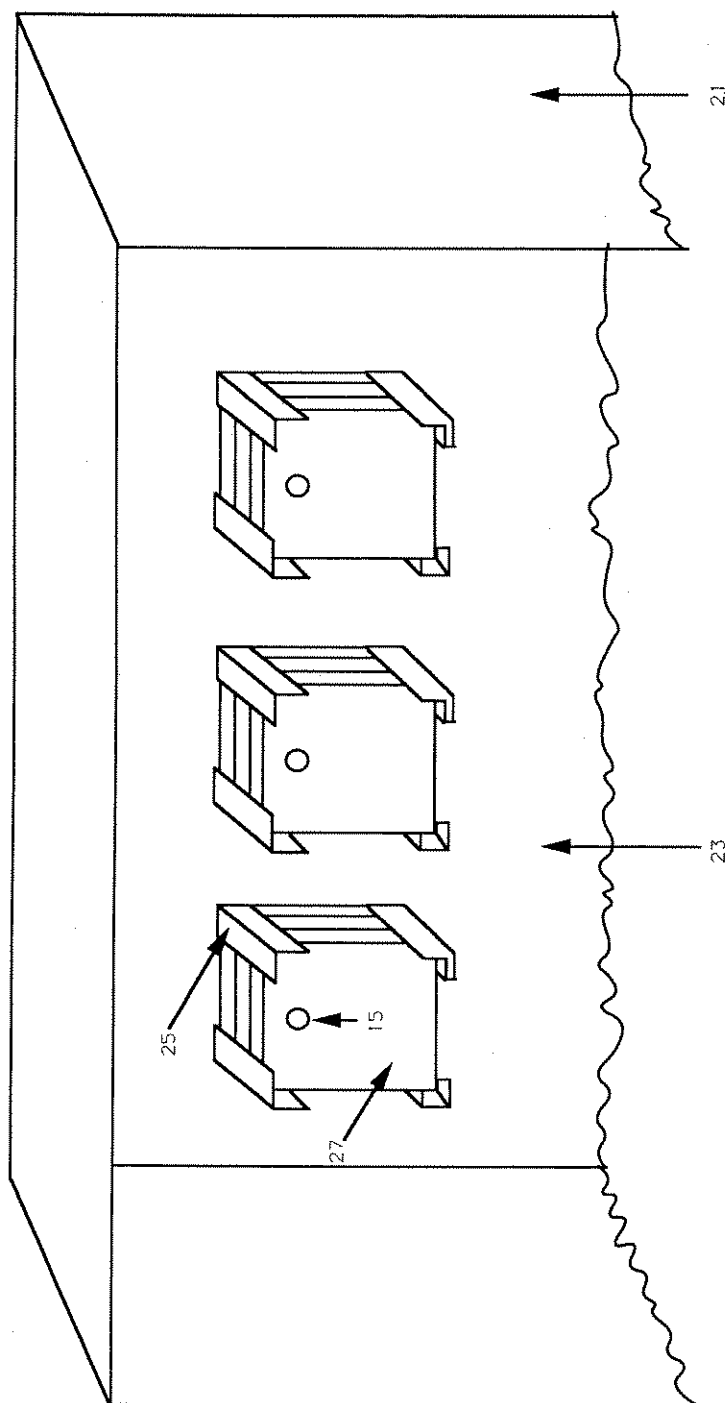


Figure 4

| | | |
|-----------|-------------|----------|
| APPROVED | D.G. FIG. 6 | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | 414 | 273 |

295495

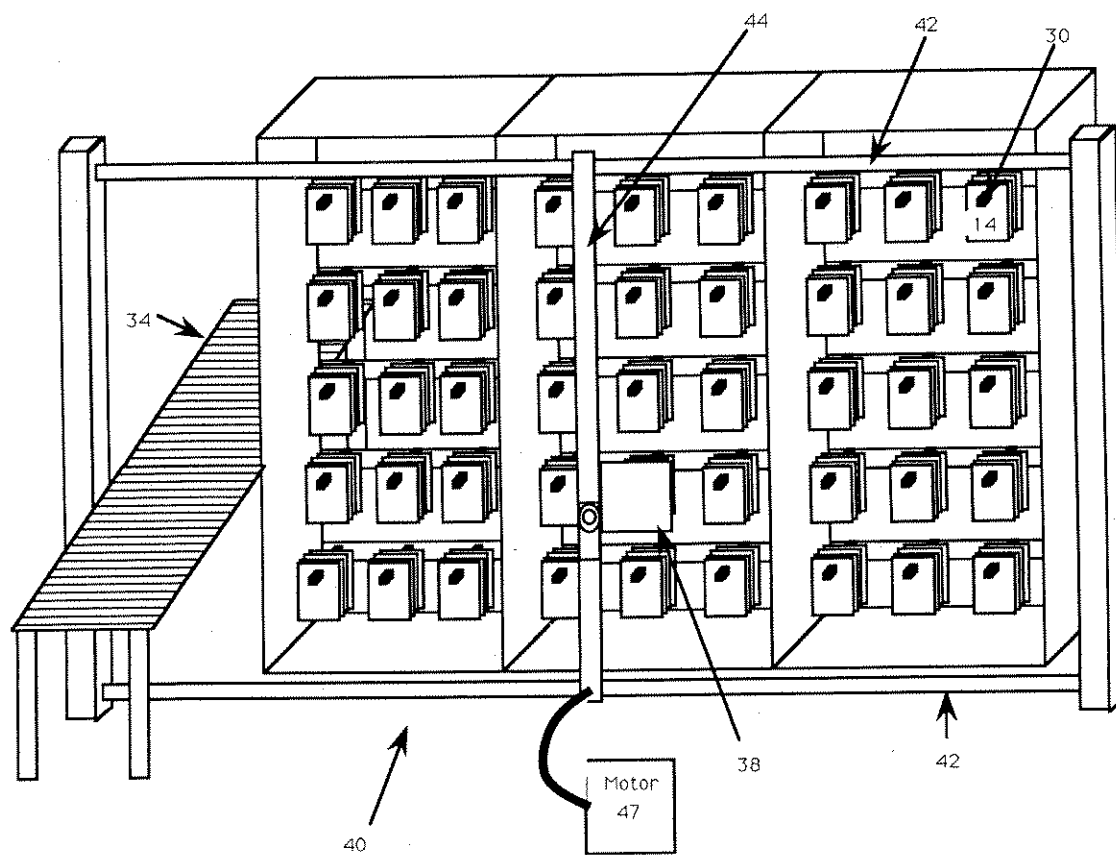


Figure 6

| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

295495

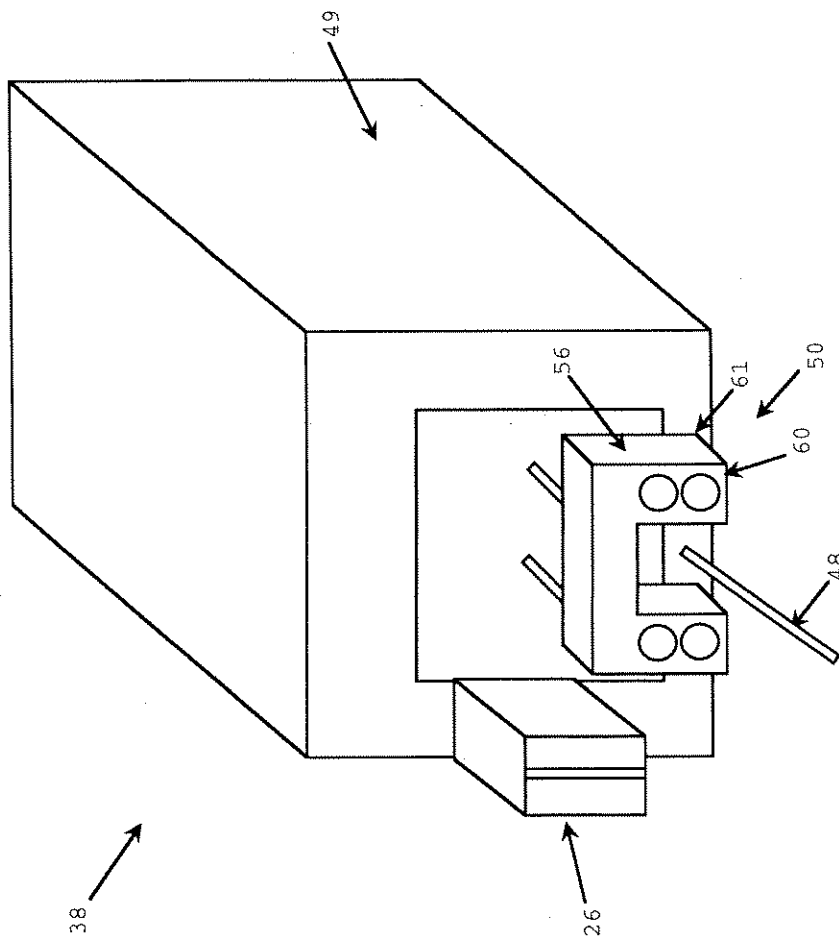


Figure 7

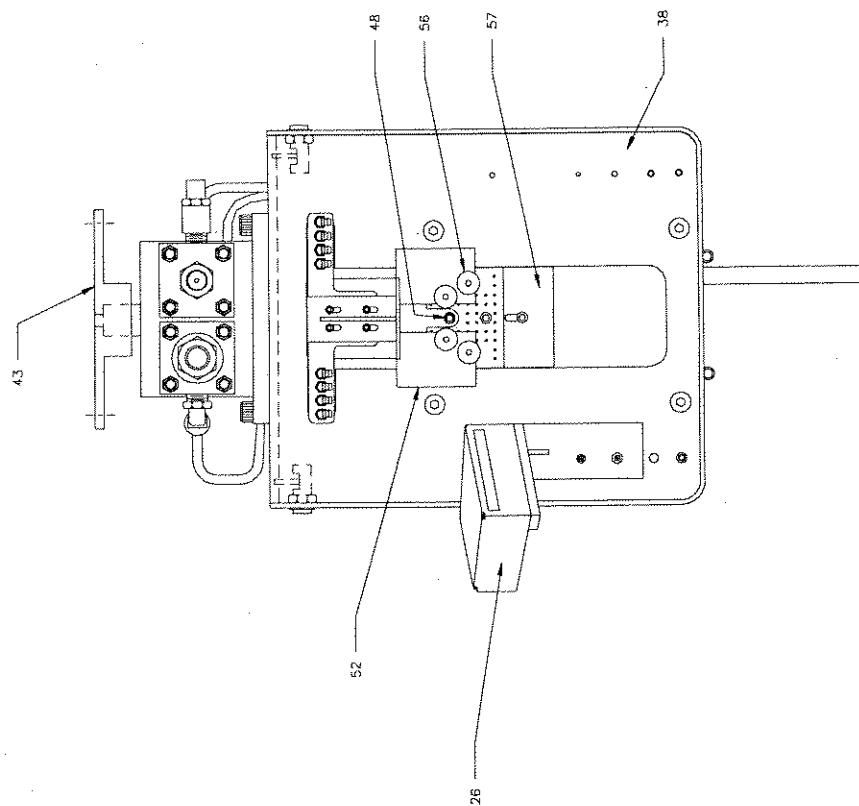
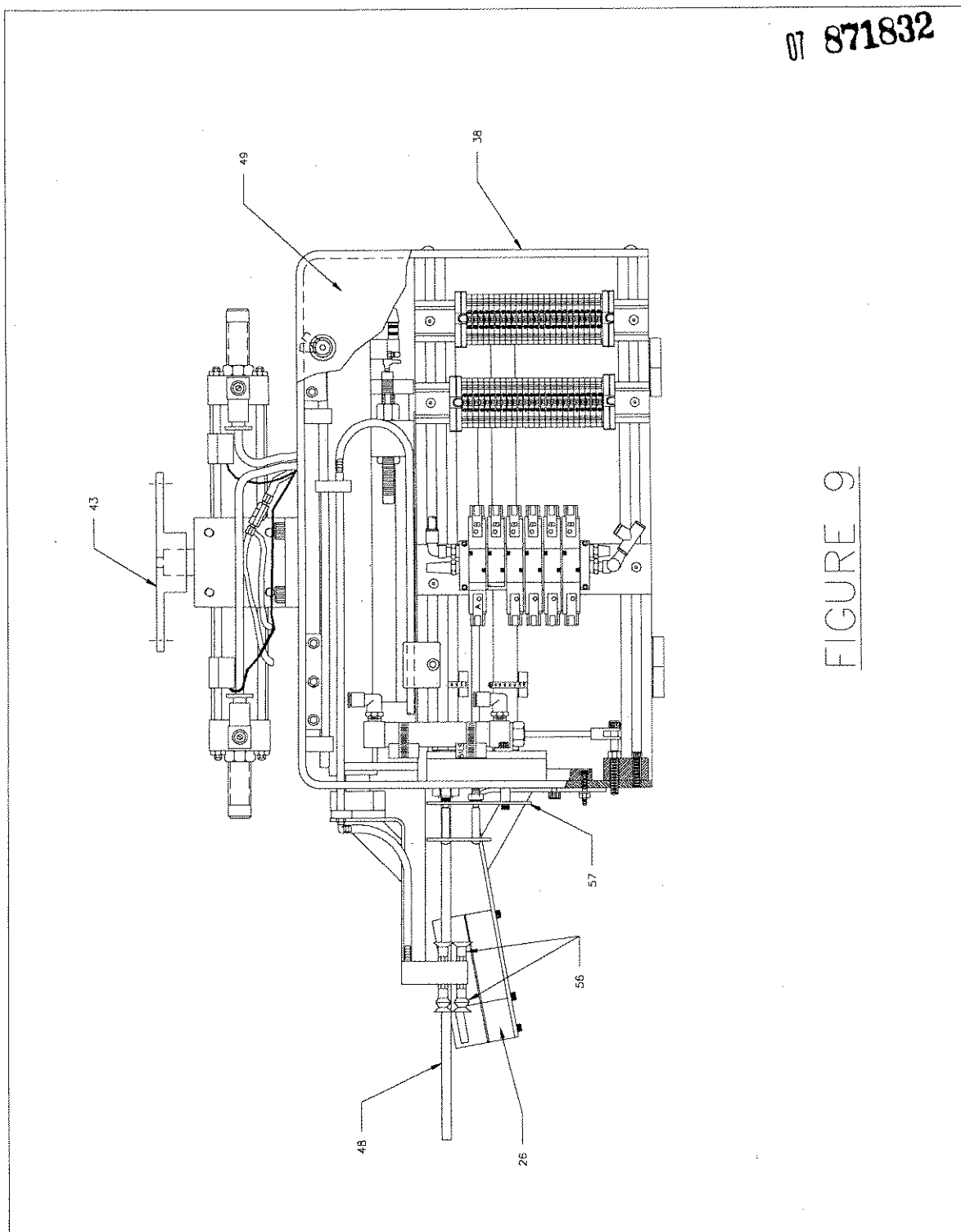
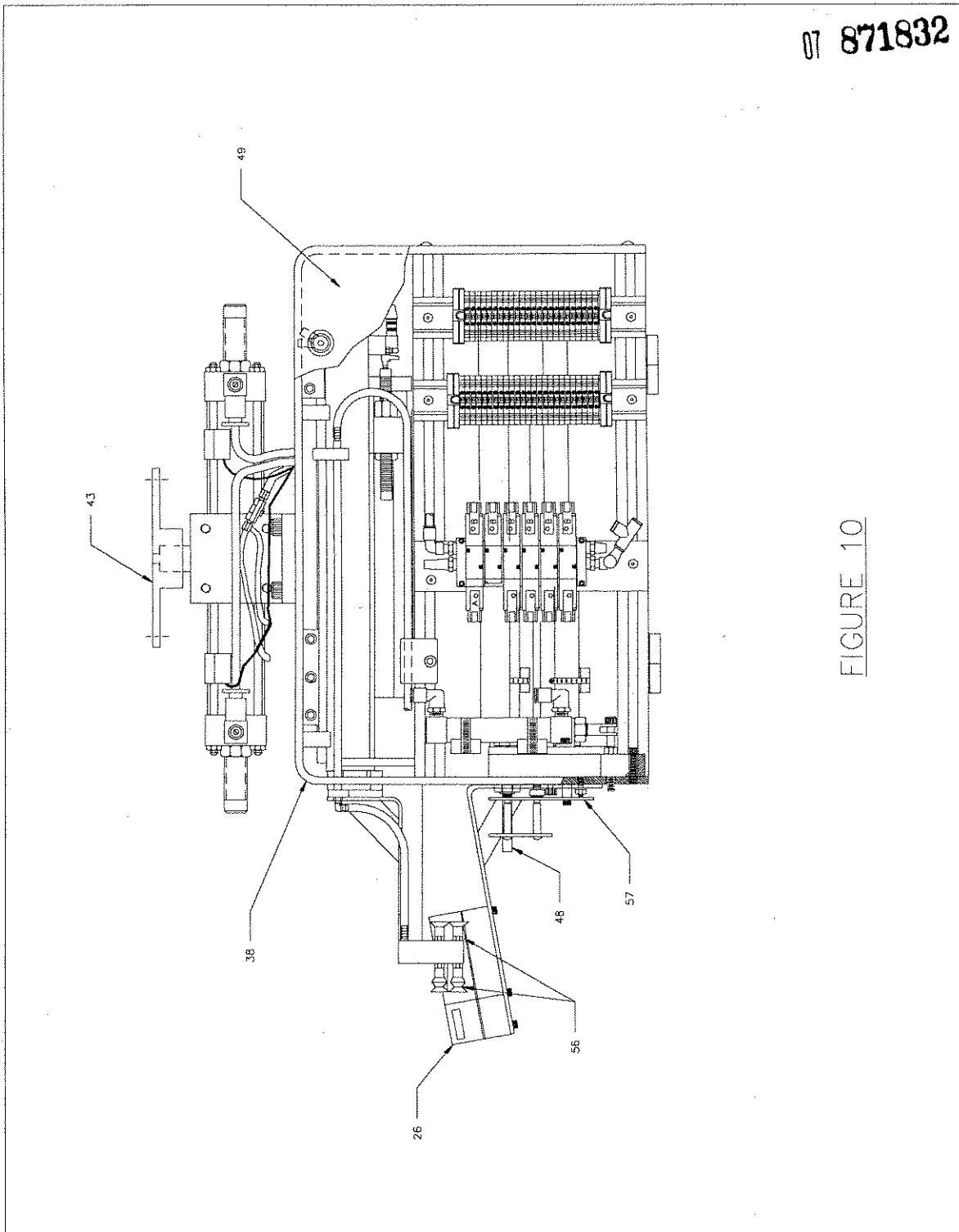


FIGURE 8

07 871832





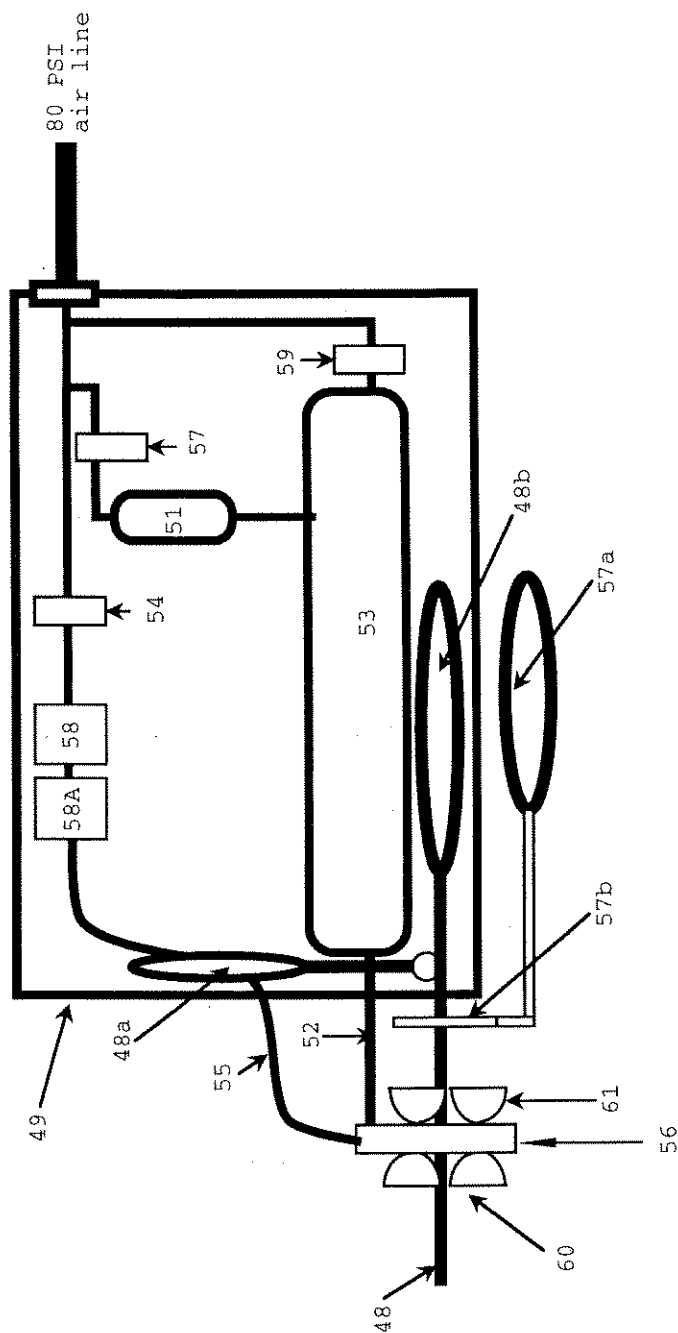


Figure 11

07 871832

| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

295495

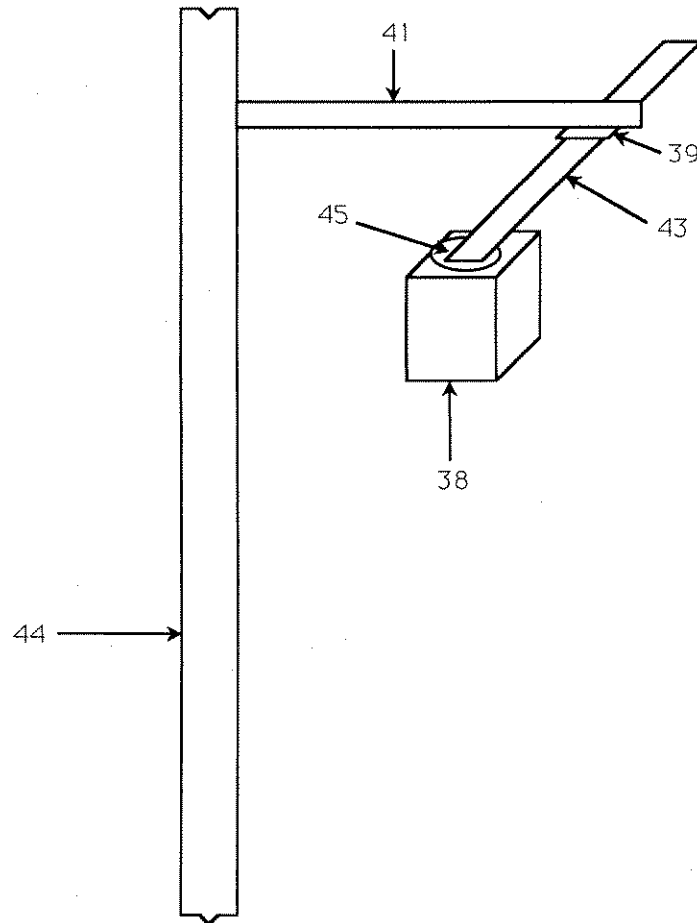


Figure 12

| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

295495

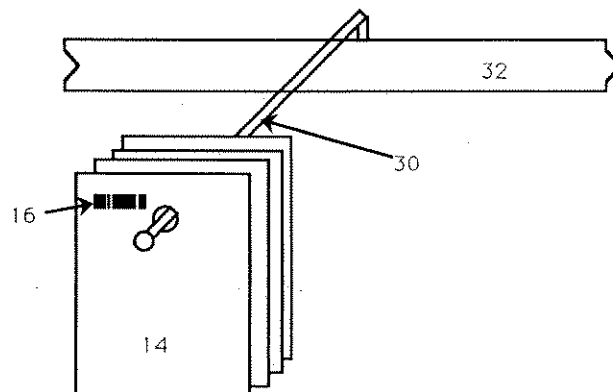


Figure 13

| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

295495

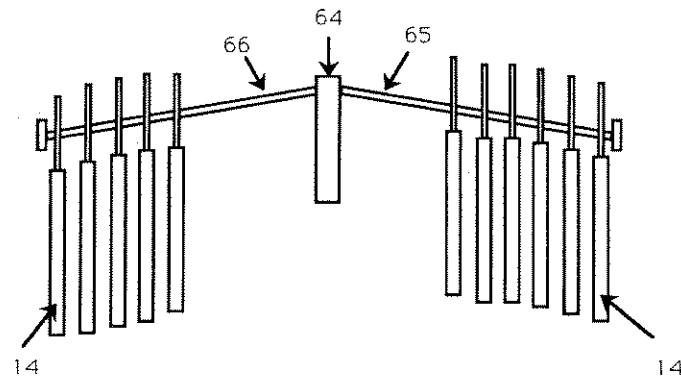


Figure 14

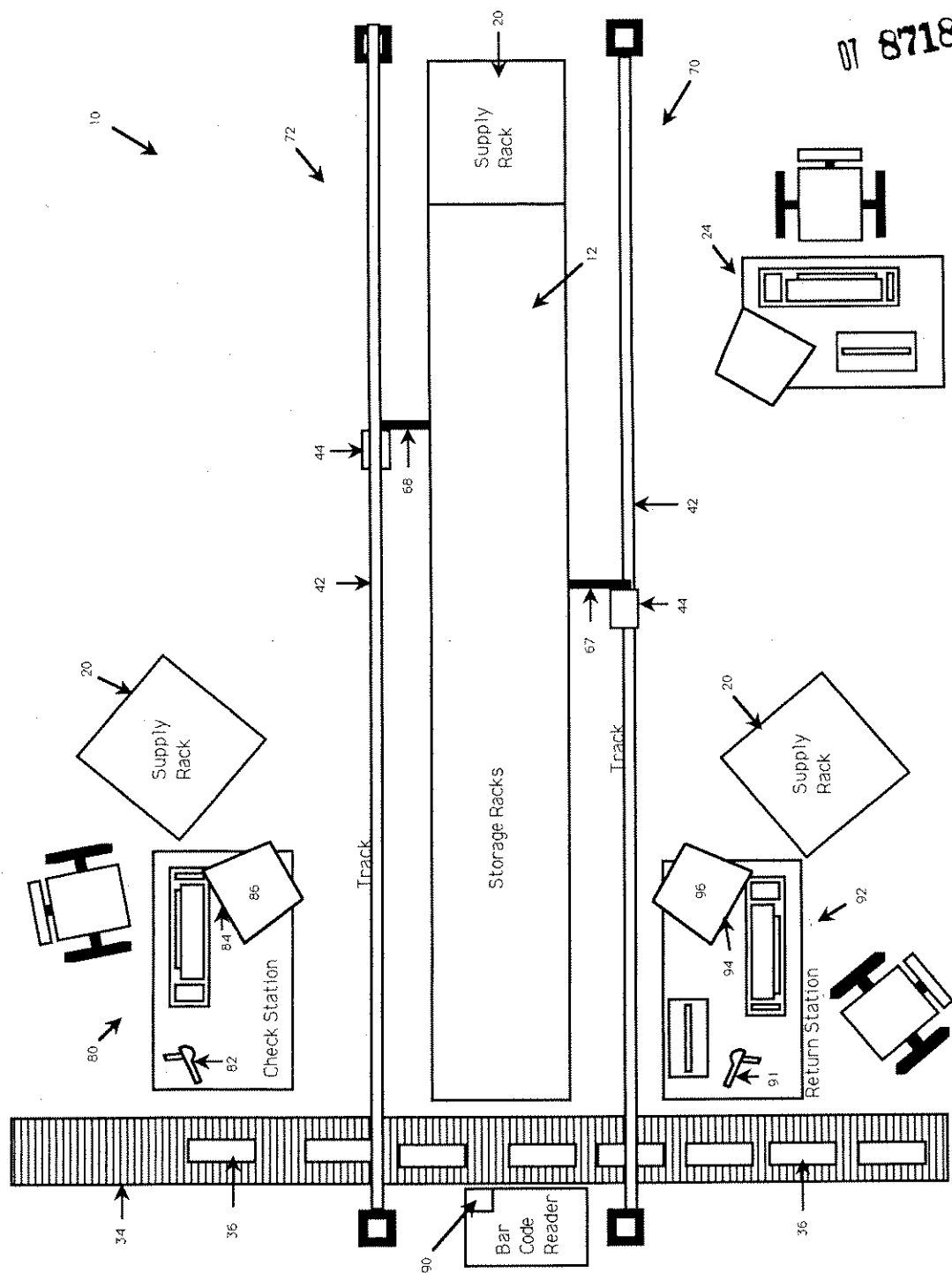
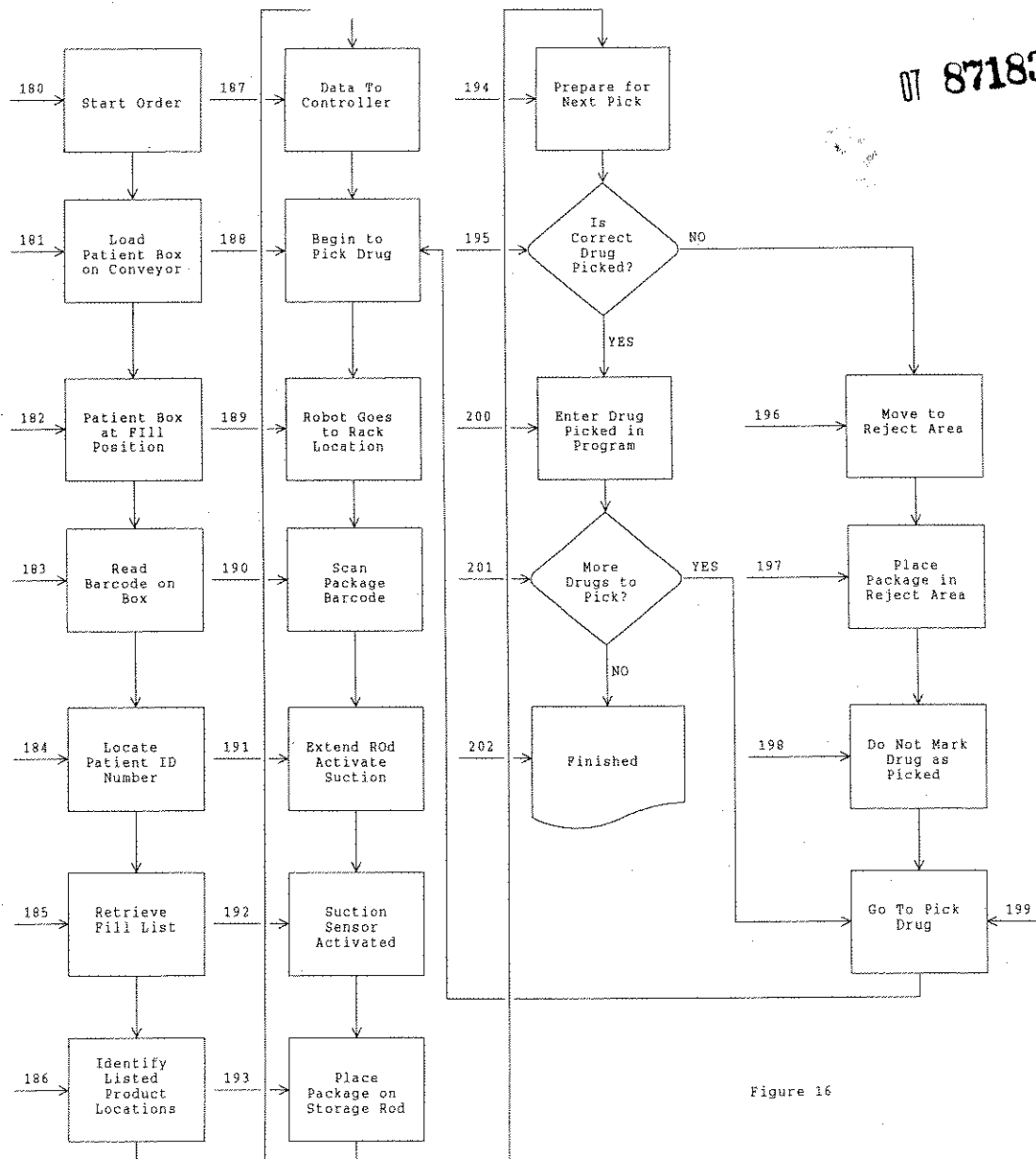
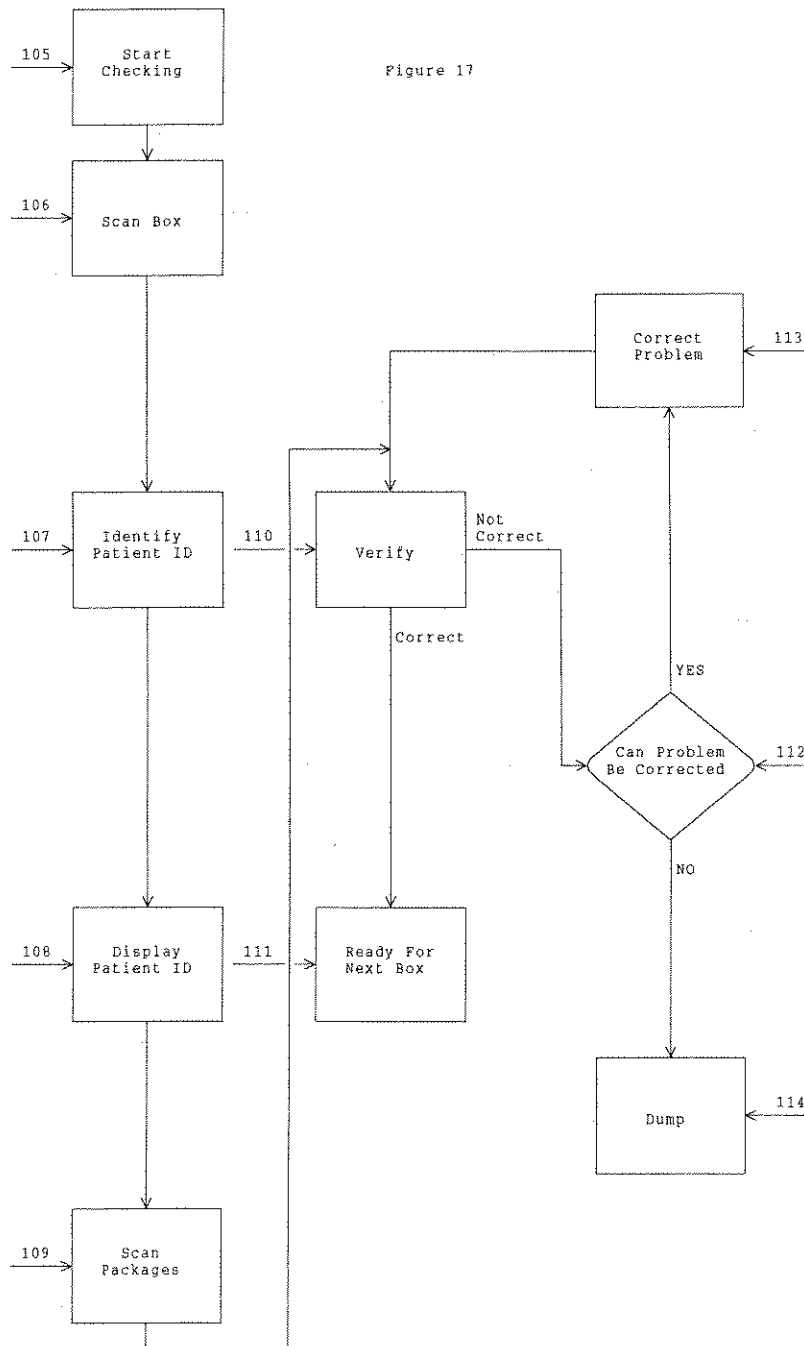


Figure 15



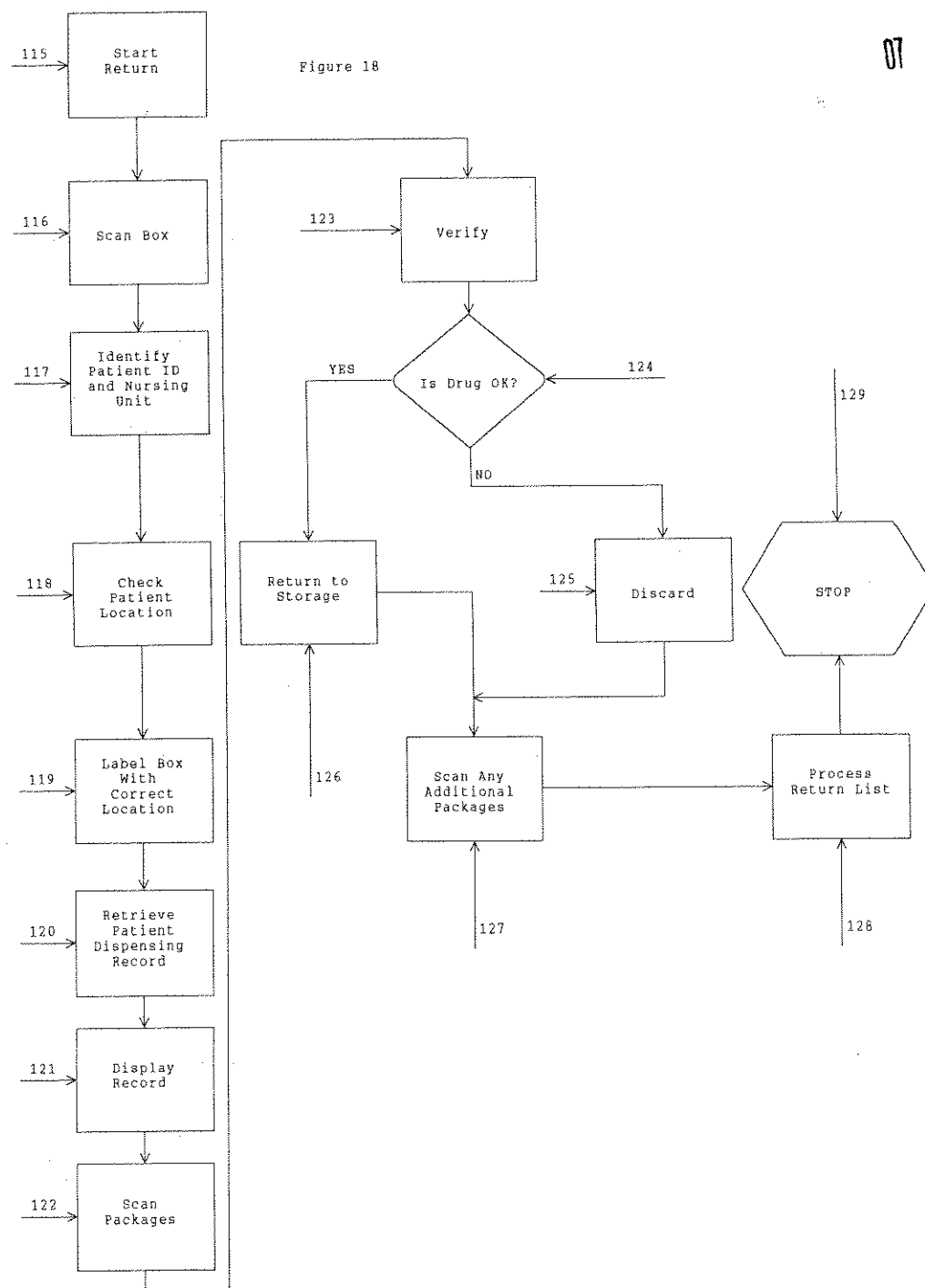
07 871832

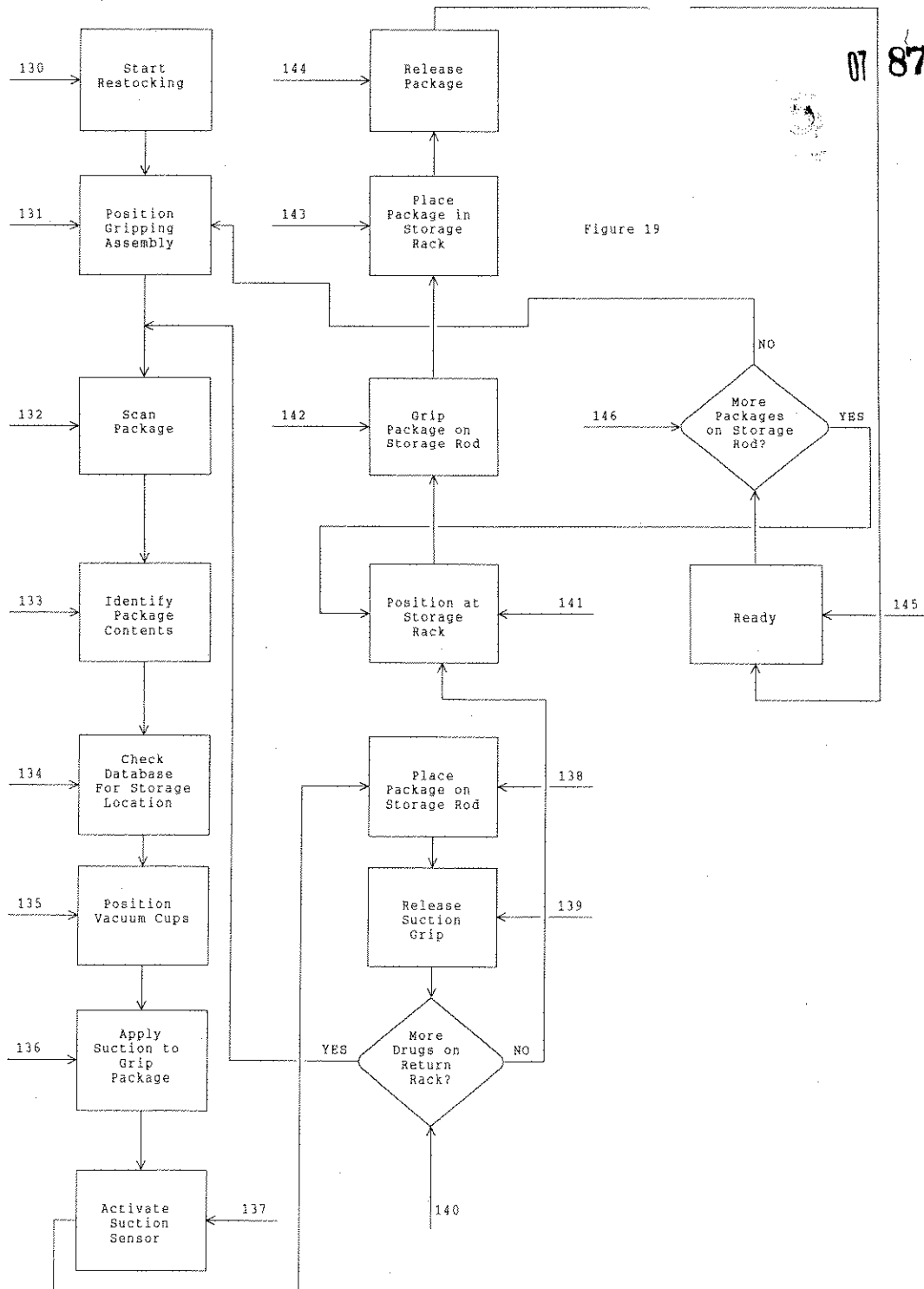
Figure 17



07 871832

Figure 18







07 871832

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" UNDER
37 CFR 1.10 - SEPARATE PAPER -**

ATTORNEY'S DOCKET NO.

#920015

IN RE APPLICATION OF

Sean C. McDonald, et al.

SERIAL NUMBER

FILED

FOR AN AUTOMATED SYSTEM FOR SELECTING AND

DELIVERING PACKAGES FROM A STORAGE AREA

(CTP of Serial No. 469,217, filed 1/24/90)

CRP. ART UNIT

EXAMINER

"Express Mail" mailing label number B84265991

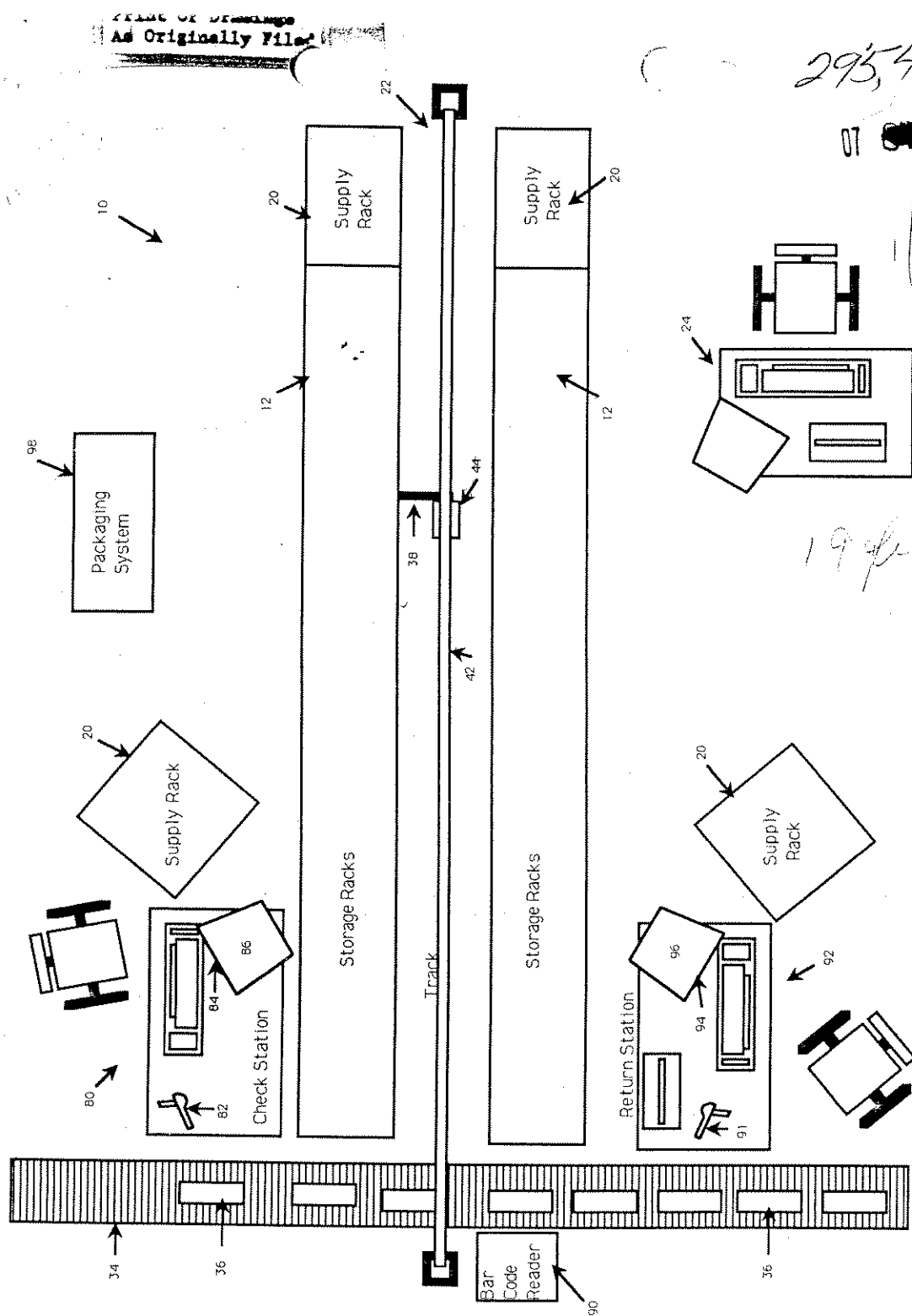
Date of deposit April 21, 1992

I hereby certify that this paper or fee is being deposited with
the United States Postal Service "Express Mail Post Office to
Addressee" service under 37 CFR 1.10 on the date indicated above
and is addressed to the Commissioner of Patents and Trademarks,
Washington, D.C. 20231.

Lynn J. Alstadt

(Typed or printed name of person mailing paper or fee)

(Signature of person mailing paper or fee)



295,495

07

1/19

19

First of Drawings
As Originally Filed

01 871832

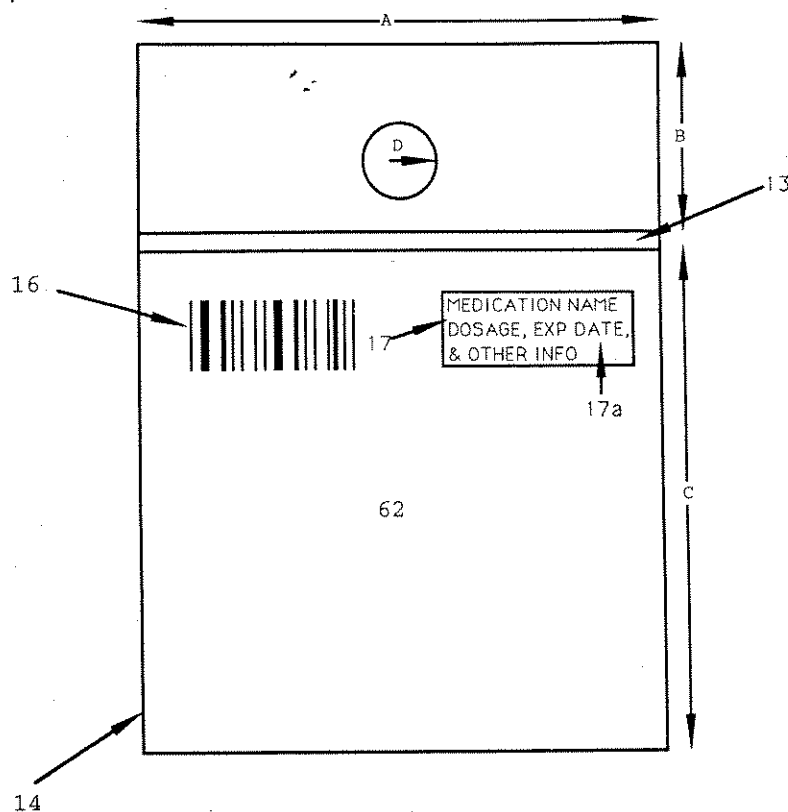


Figure 2

PRINT OF DRAWINGS
As Originally Filed

07 871832

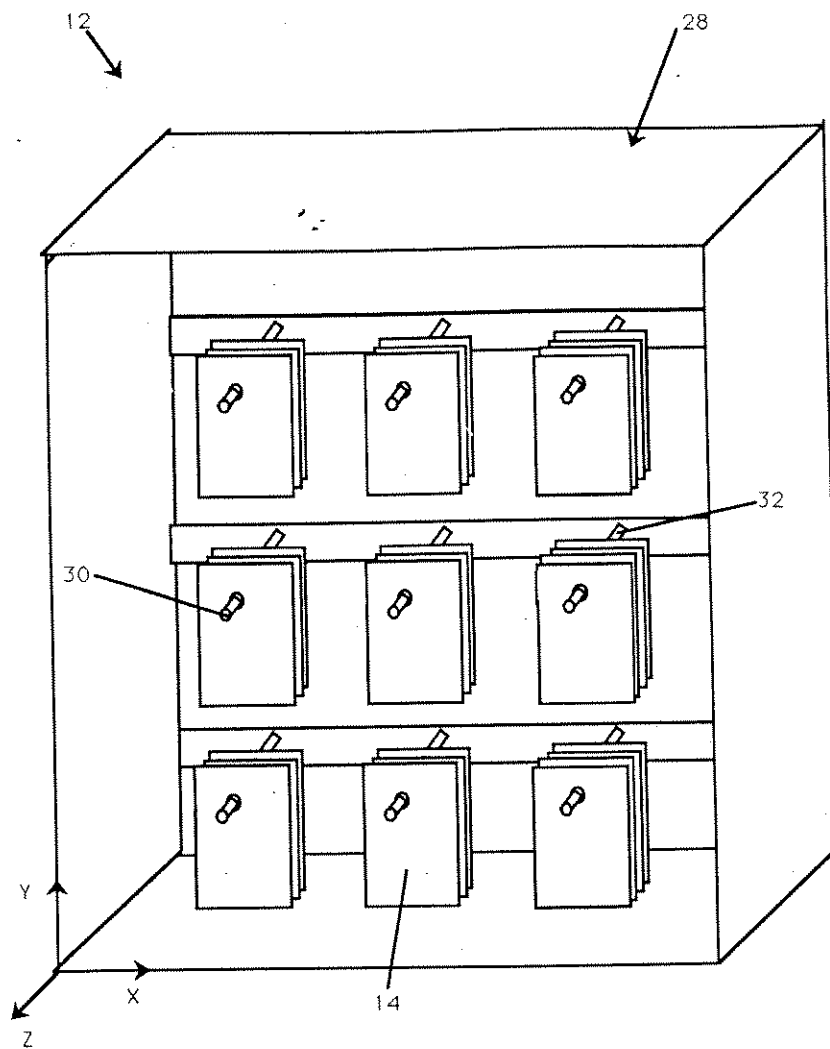


Figure 3

As Originally Filed

07 871832

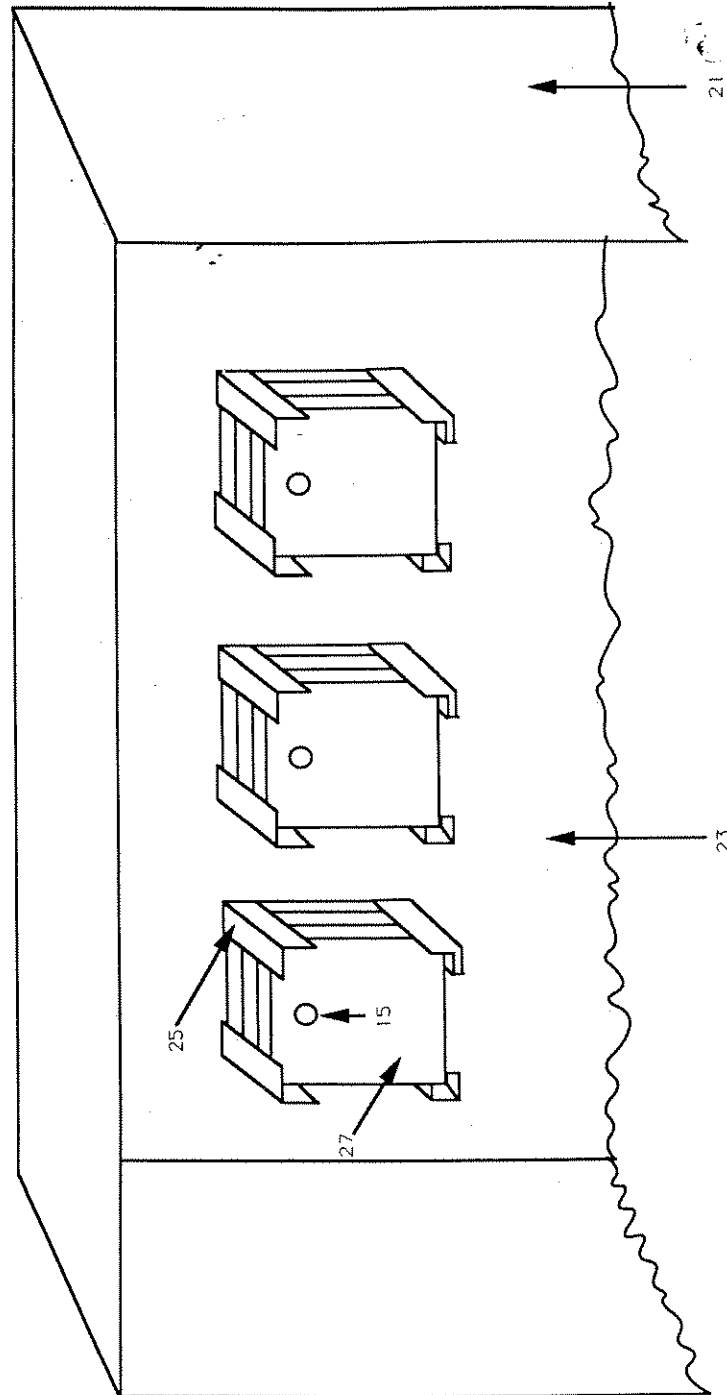


Figure 4

PRINT OF DRAWINGS
As Originally Filed

07 871832

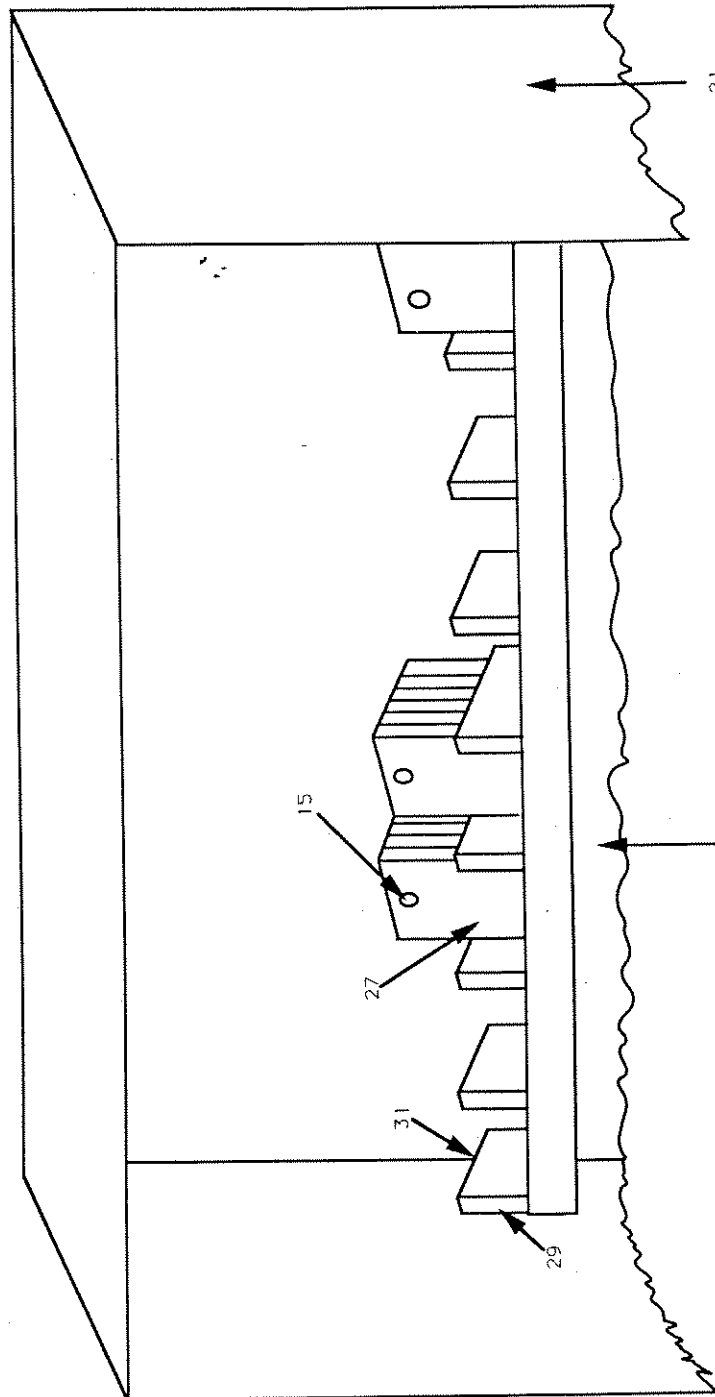


Figure 5

PRINT OF DRAWINGS
As Originally Filed

07 871832

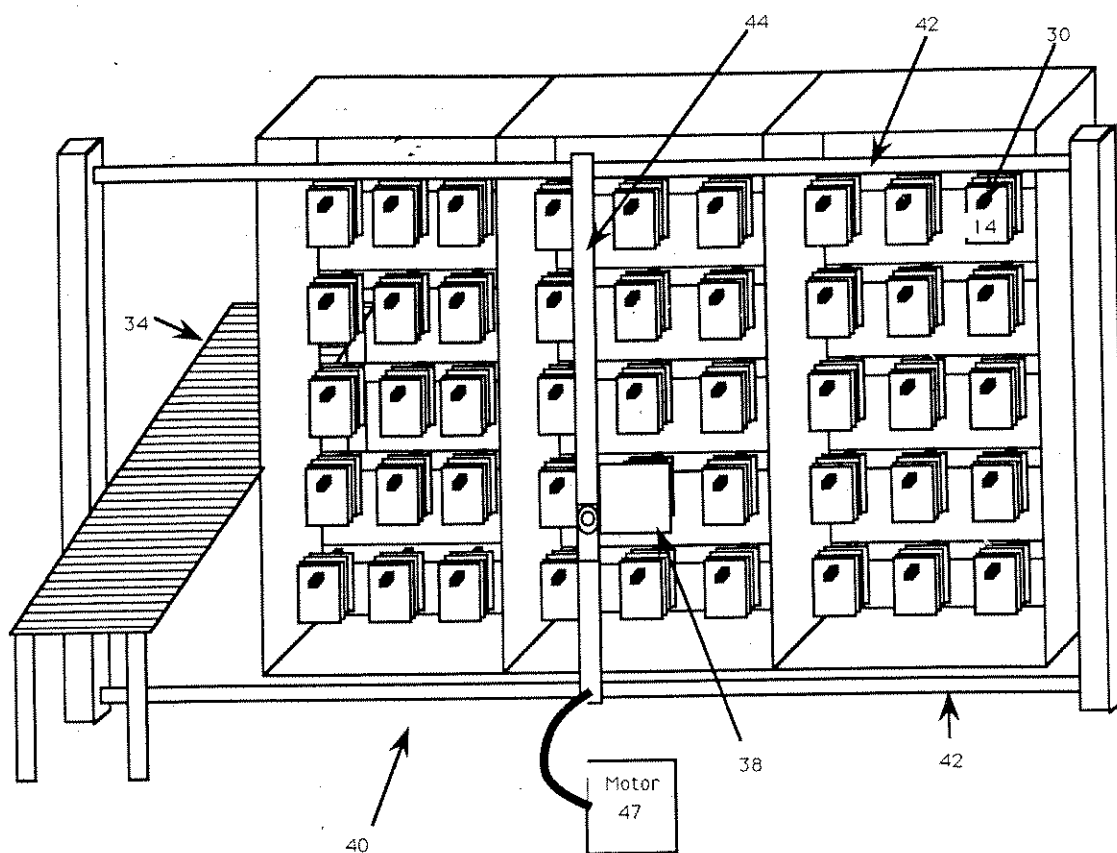


Figure 6

Print of Drawings
As Originally Filed

07 871832

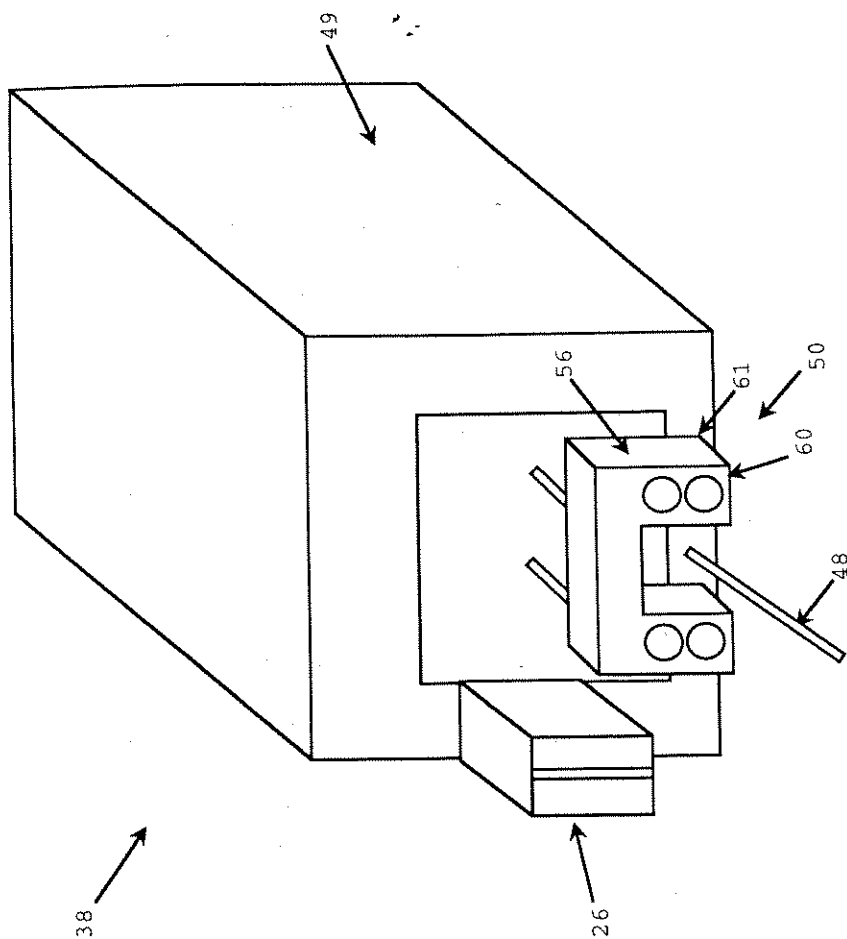


Figure 7

FIGURE 8
As Originally Filed

01 871832

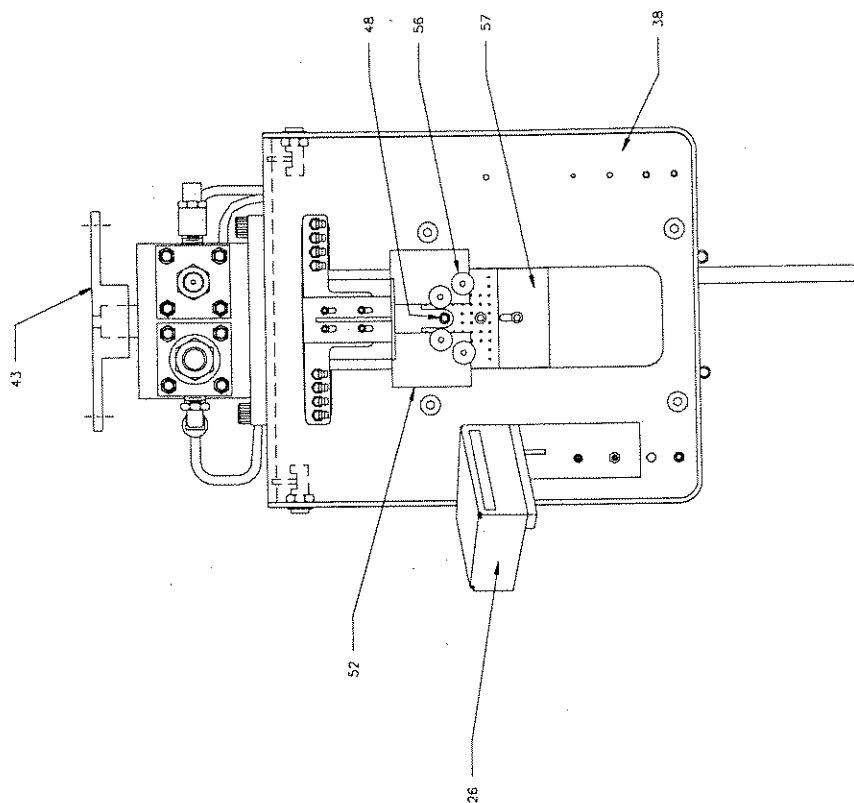


FIGURE 8

FRONT OF DRAWINGS
As Originally Filed

871832

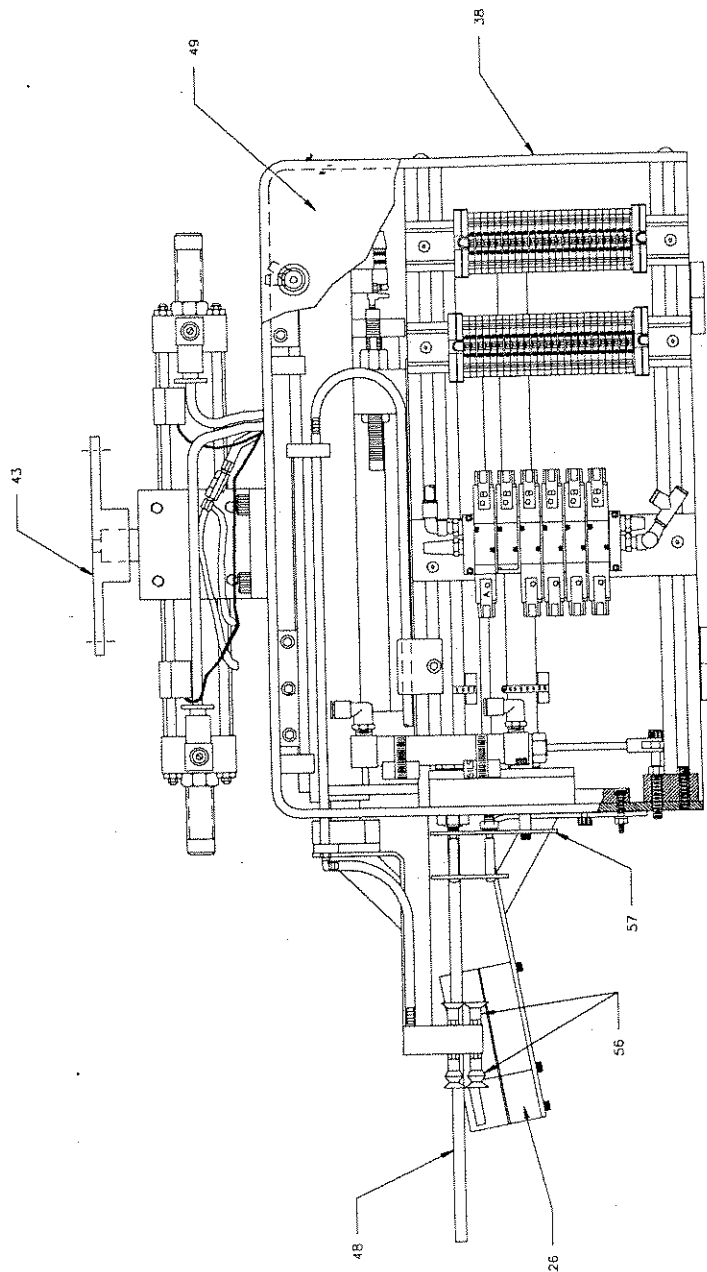


FIGURE 9

Print of Drawings
As Originally Filed

07 871832

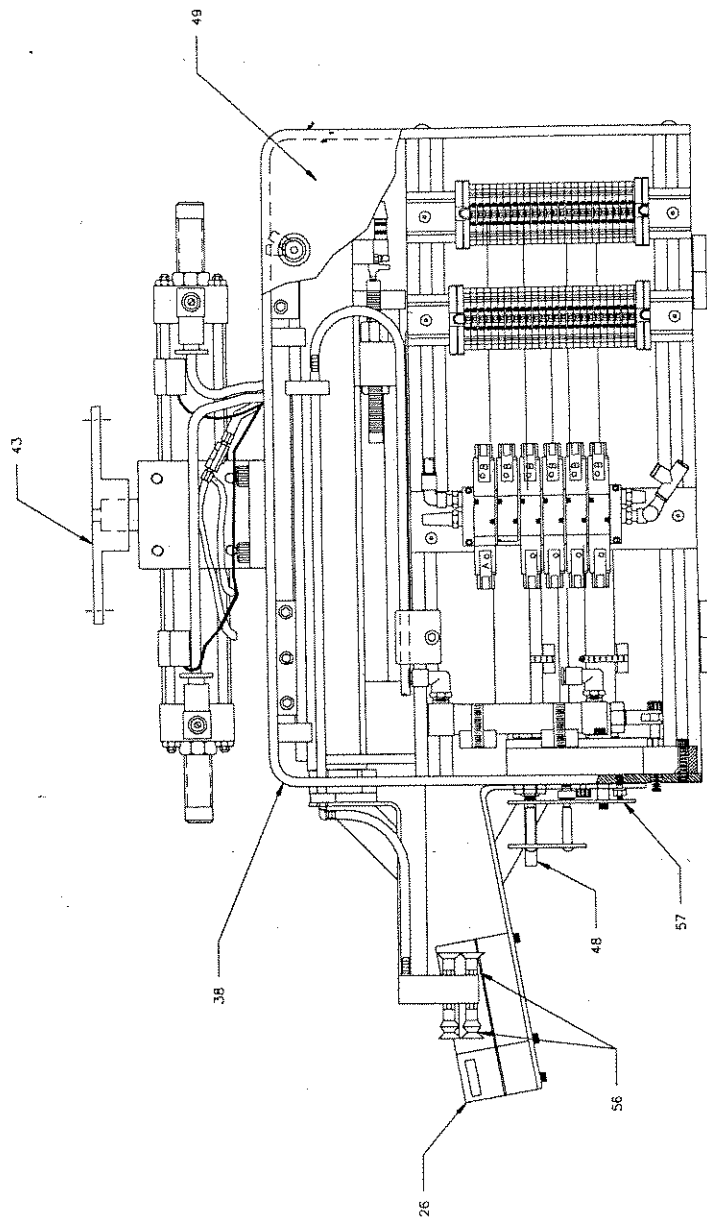


FIGURE 10

Print of Drawings
As Originally Filed

07 871832

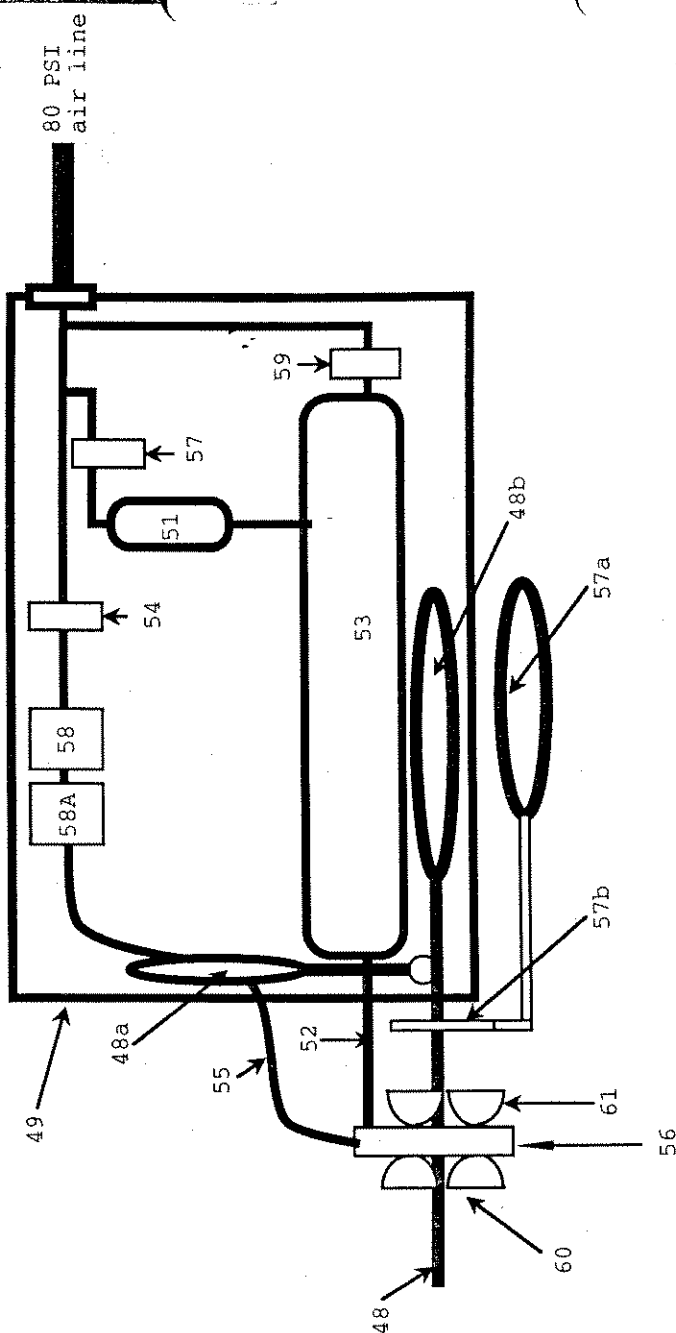


Figure 11

PRINT OF DRAWINGS
As Originally Filed

07 871832

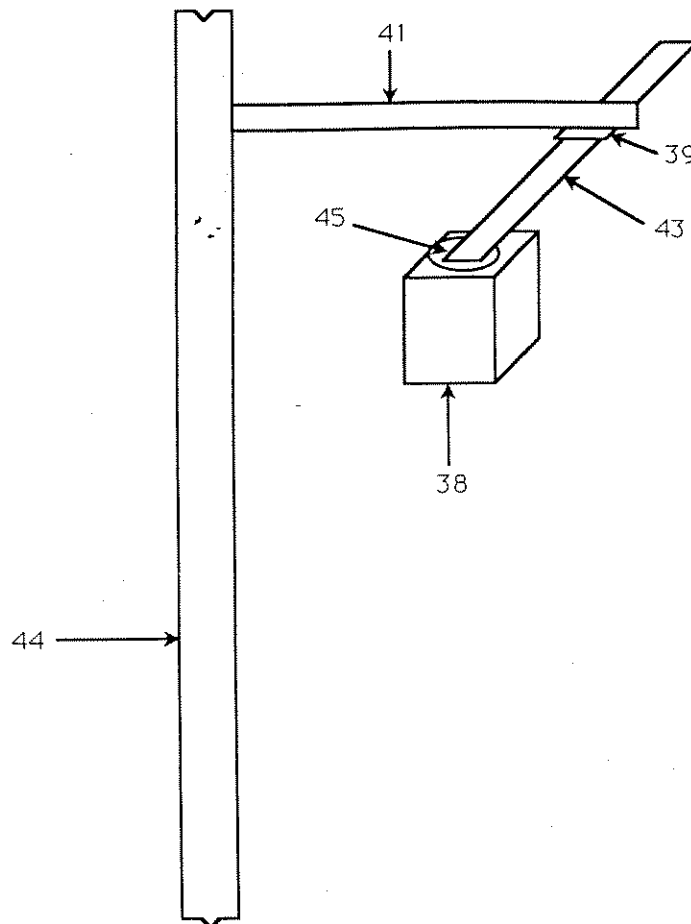


Figure 12

FIGURE 13
As Originally Filed

07 871832

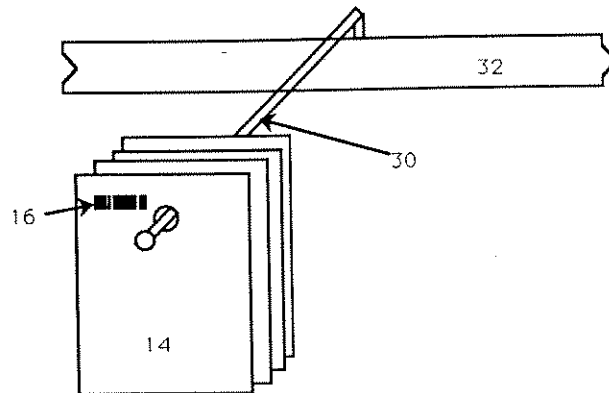


Figure 13

FRONT OF DRAWING
As Originally Filed

07 871832

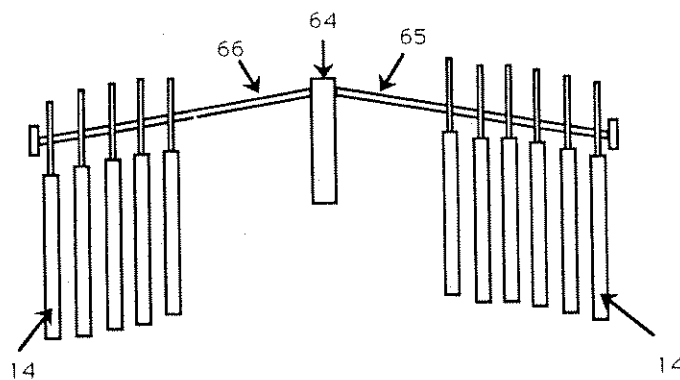


Figure 14

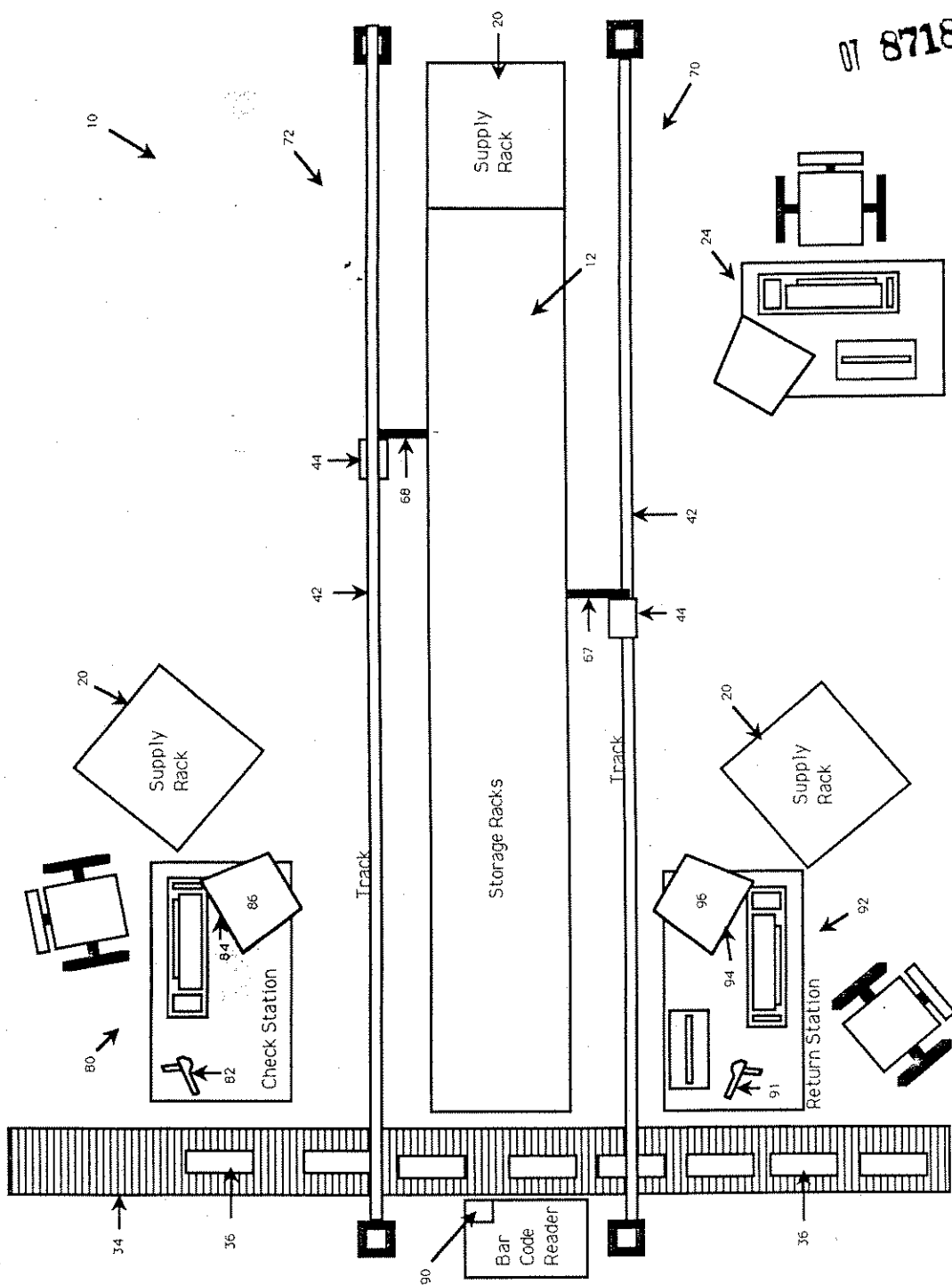
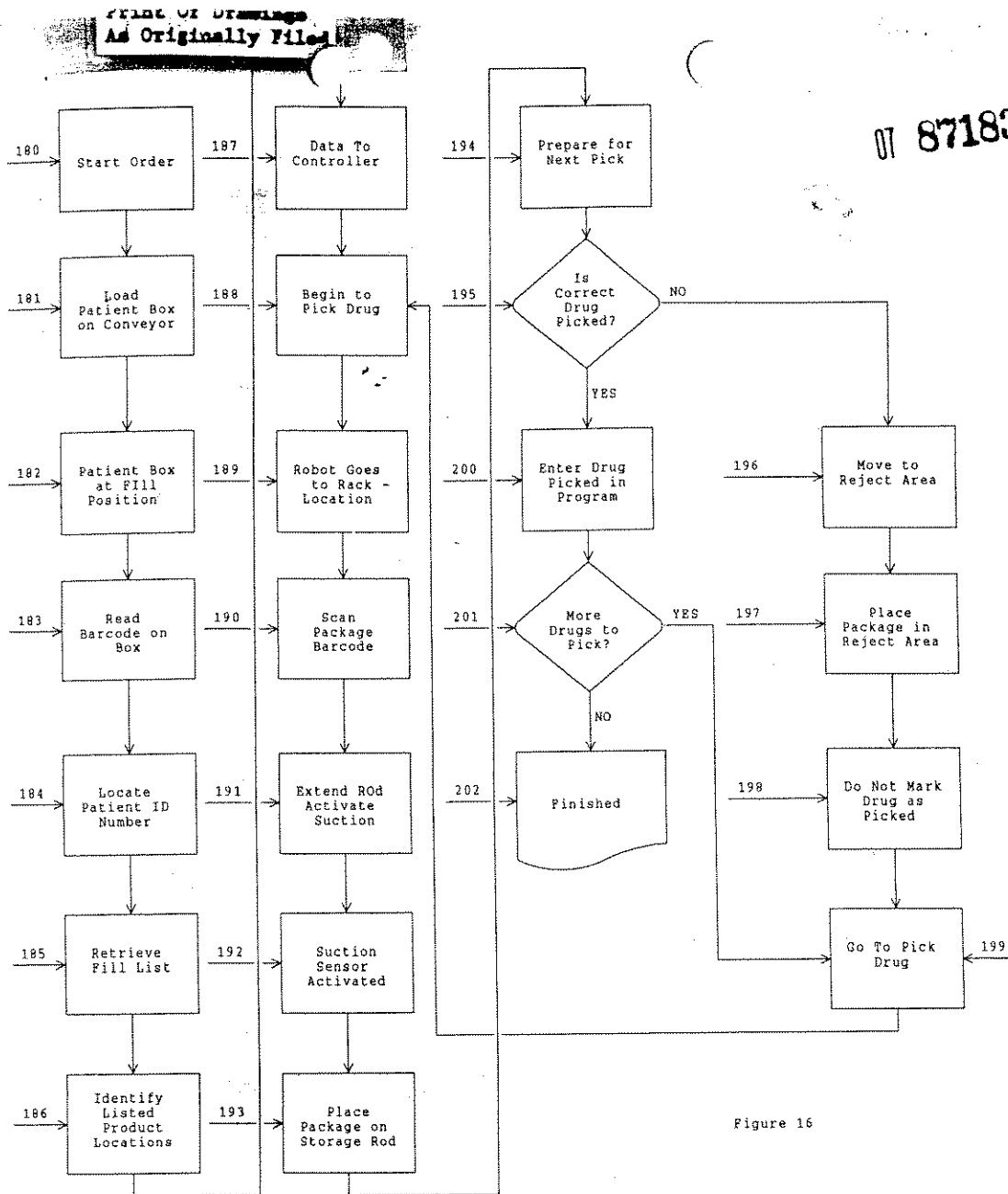
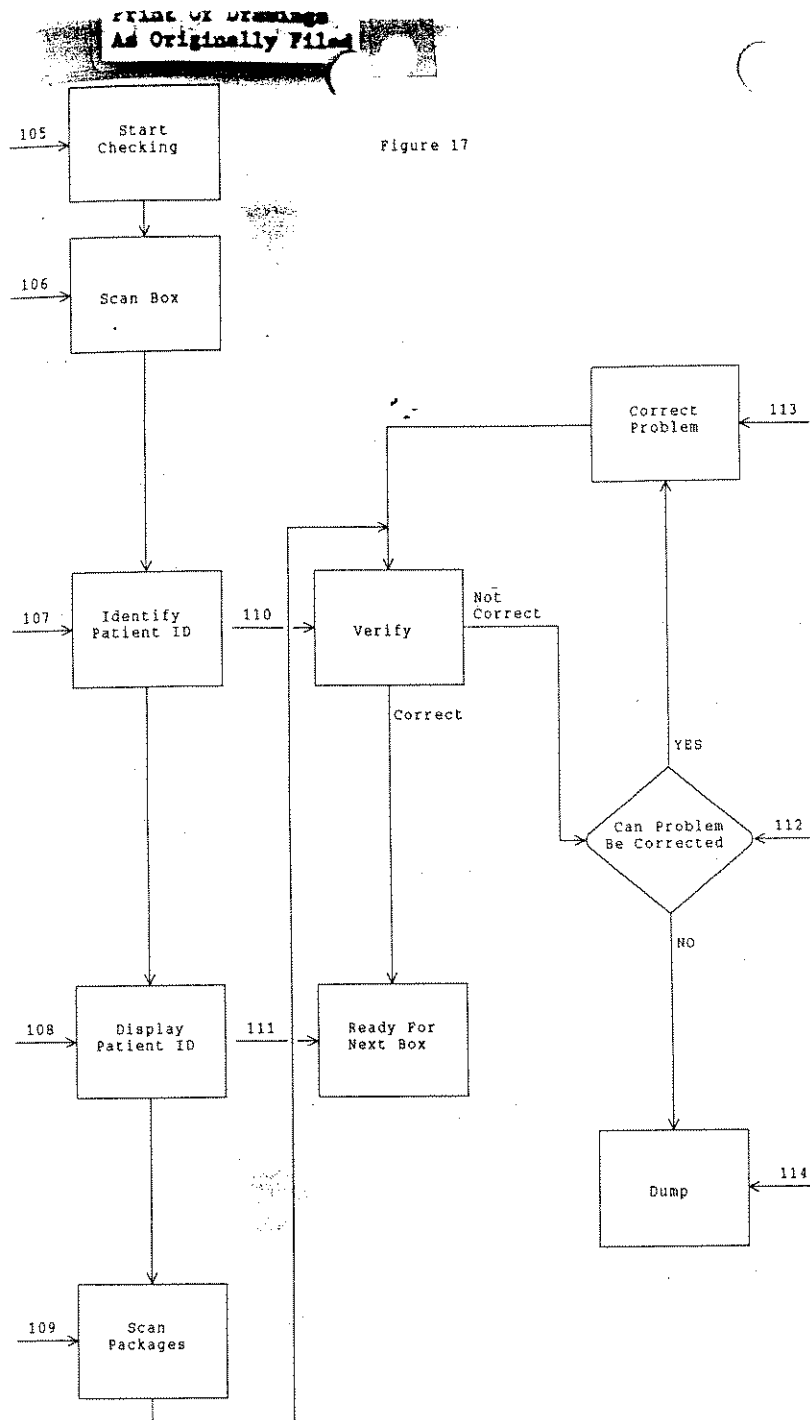
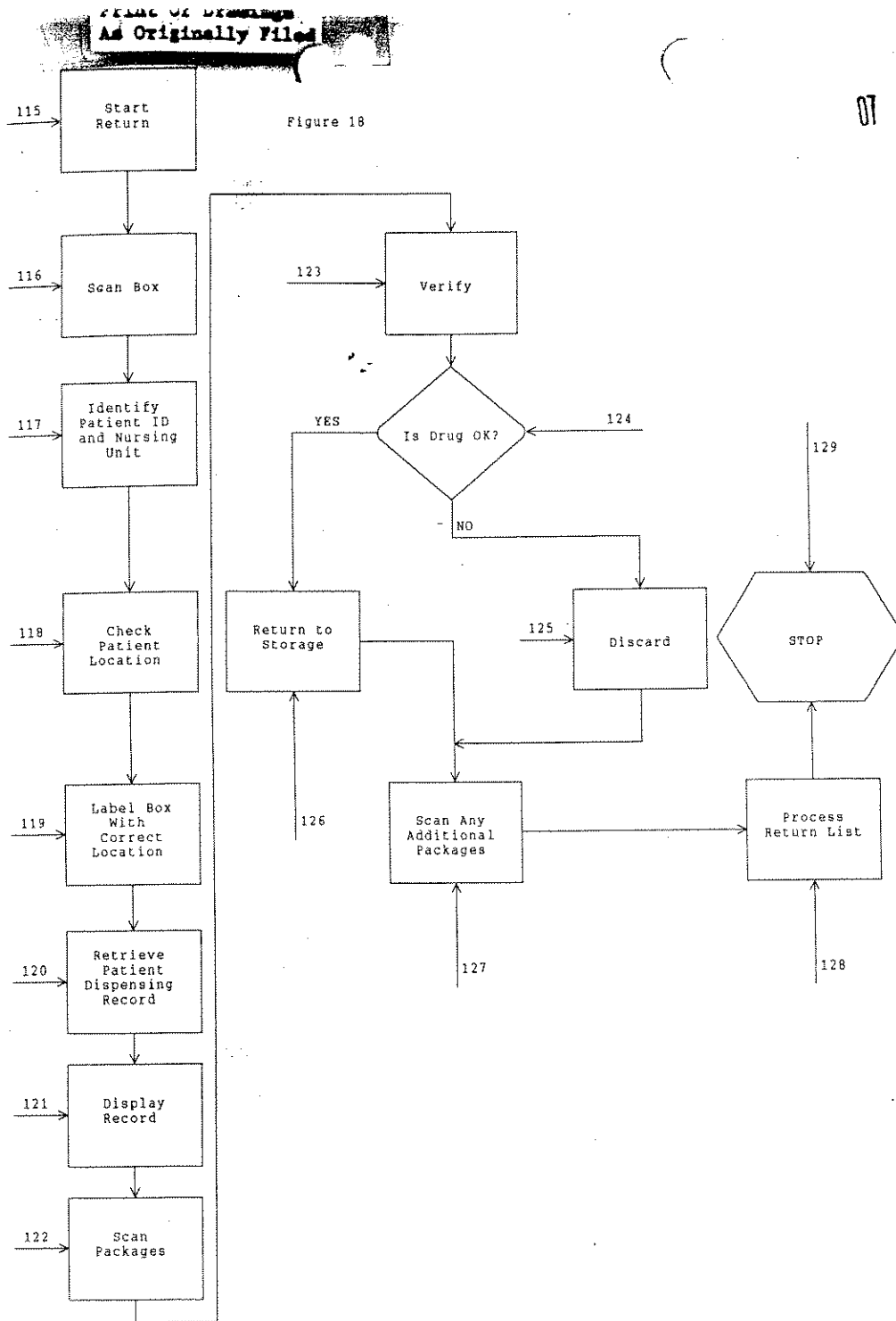


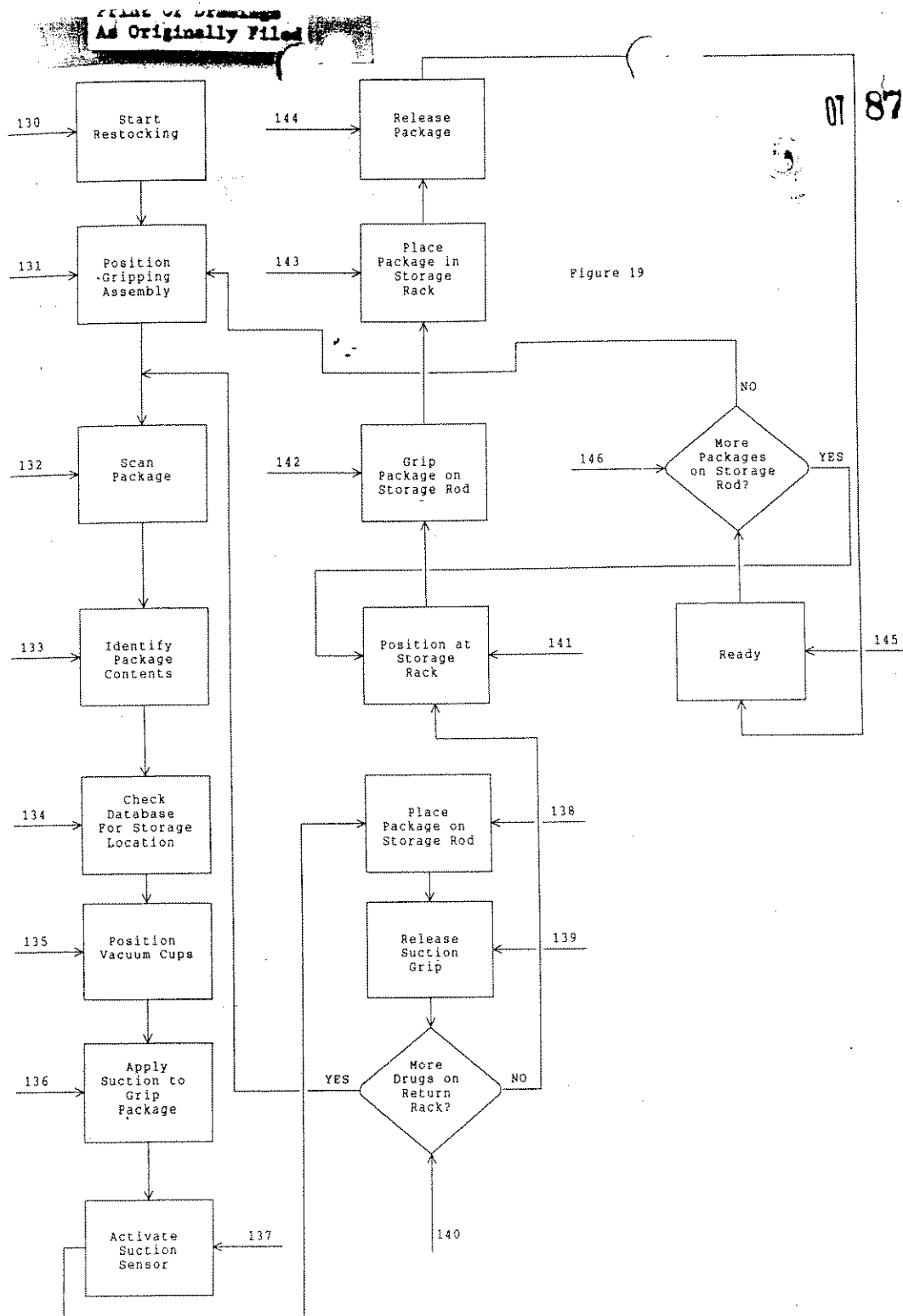
Figure 15

07 871832










**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

| APPLICATION NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTY DOCKET NO./TITLE |
|--------------------|-------------|-----------------------|-----------------------|
|--------------------|-------------|-----------------------|-----------------------|

| | | | |
|------------|----------|----------|----------|
| 07/871,832 | 04/21/92 | MCDONALD | S 920015 |
|------------|----------|----------|----------|

 LYNN J. ALSTADT
BUCHANAN INGERSOLL PROFESSIONAL CORP.
56TH FLOOR, 600 GRANT ST.
PITTSBURGH, PA 15219

0000

DATE MAILED: 05/11/92

**NOTICE TO FILE MISSING PARTS OF APPLICATION
FILING DATE GRANTED**

A filing date has been granted to this application. However, the following parts are missing.

If all missing parts are filed within the period set below, the total amount owed by applicant as a

☐ large entity, ☒ small entity (verified statement filed), is \$ 65⁰⁰.

1. ☐ The statutory basic filing fee is: ☐ missing ☐ insufficient. Applicant as a ☐ large entity ☐ small entity, must submit \$ _____ to complete the basic filing fee and MUST ALSO SUBMIT THE SURCHARGE AS INDICATED BELOW.
2. ☐ Additional claim fees of \$ _____ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due. NO SURCHARGE IS REQUIRED FOR THIS ITEM.
3. ☐ The oath or declaration:
 - ☐ is missing.
 - ☐ does not cover items omitted at time of execution.
 An oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.
4. ☐ The oath or declaration does not identify the application to which it applies. An oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.
5. ☐ The signature to the oath or declaration is: ☐ missing; ☐ a reproduction; ☐ by a person other than the inventor or a person qualified under 37 CFR 1.42, 1.43, or 1.47. A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.
6. ☒ The signature of the following joint inventor(s) is missing from the oath or declaration:

E. J. Huts + P. T. Huts An oath or declaration listing the names of all inventors and signed by the omitted inventor(s), identifying this application by the above Application Number and Receipt Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.
7. ☐ The application was filed in a language other than English. Applicant must file a verified English translation of the application and a fee of \$30.00 under 37 CFR 1.17(k), unless this fee has already been paid. NO SURCHARGE IS REQUIRED FOR THIS ITEM.
8. ☐ A \$50.00 processing fee is required for returned checks. (37 CFR 1.21(m)).
9. ☐ Your filing receipt was mailed in error because check was returned without payment.
10. ☐ Other.

An Application Number and Filing Date have been assigned to this application. The missing parts and fees identified above in items 1 and 3-6 must be timely provided ALONG WITH THE PAYMENT OF A SURCHARGE of ~~\$120.00~~ ^{120⁰⁰} for large entities or ~~\$60.00~~ ^{65⁰⁰} for small entities who have filed a verified statement claiming such status. The surcharge is set forth in 37 CFR 1.16(e). Applicant is given ONE MONTH FROM THE DATE OF THIS LETTER, OR TWO MONTHS FROM THE FILING DATE of this application, WHICHEVER IS LATER, within which to file all missing parts and pay any fees required above to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

 Direct the response to, and any questions about, this notice to ATTENTION: Application Division,
Special Handling Unit.

A copy of this notice MUST be returned with response.

 For: Manager, Application Division
(703) 557- 308-1402



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :
SEAN McDONALD et al. : AN AUTOMATED SYSTEM
Serial No. 07/871,832 : FOR SELECTING AND
Filed April 21, 1992 : DELIVERING PACKAGES FROM
A STORAGE AREA

LETTER

Pittsburgh, Pennsylvania 15219

June 22, 1992

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

Sir:

This is in response to the Notice to File Missing Parts of Application mailed May 11, 1992. Submitted herewith is an original supplemental Declaration and Power of Attorney signed by the four inventors of the above-identified patent application. A check in the amount of \$65.00 is also enclosed to cover the surcharge fee. Any additional fees may be charged against deposit account No. 02-4553.

Respectfully submitted,

BUCHANAN INGERSOLL, P.C.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on

June 22, 1992

[Signature]
Buchanan Ingersoll

By

[Signature]
Lynn J. Alstadt

Registration No. 29,362

Attorneys for Applicants

(412) 562-1632

Docket No. 920015

DECLARATION AND POWER OF ATTORNEY

I, the below named inventor, hereby declare that:

My residence, post office address and citizenship is as stated below next to my respective name.

I believe I am the original, first and sole inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled AN AUTOMATED SYSTEM FOR SELECTING AND DELIVERING PACKAGES FROM A STORAGE AREA, the specification of which was filed on April 21, 1992, and bears Serial No. 07/871,832.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).

I hereby claim the benefit under Title 35, United States Code, Section 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, Section 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, Section 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing of this application.

| <u>Application Serial No.</u> | <u>Filing Date</u> | <u>Status</u> (Patented, Pending, Abandoned) |
|-------------------------------|--------------------|-------------------------------------------------|
| <u>07/469,217</u> | <u>1/24/90</u> | <u>Abandoned</u> |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

I hereby declare that all statements made hereby of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I hereby appoint the following attorney(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected herewith: Lynn J. Alstadt, Reg. No. 29,362; George P. Baier, Reg. No. 26,717; Paul A. Beck, Reg. No. 22,289; Michael L. Dever, Reg. No. 32,216; Craig N. Killen, Reg. No. 35,218; George Raynovich, Jr., Reg. No. 19,829 and Alvin E. Ring, Reg. No. 18,697.

Address all telephone calls to Lynn J. Alstadt

Address all correspondence to Buchanan Ingersoll Professional Corporation,
56th Floor, 600 Grant Street
Pittsburgh, Pennsylvania 15219
(412) 562-1632

1-00

Full name of sole or first inventor Sean C. McDonald
 Inventor's Signature *Sean McDonald* Date 6-19-92
 Residence Pittsburgh, Allegheny County, Pennsylvania Pa Citizenship USA
 Post Office Address 419 South Braddock Avenue, Pittsburgh, Pennsylvania 15221

2-00

Full name of second joint inventor, if any Ellen J. Hertz
 Inventor's Signature *Ellen J. Hertz* Date 6-8-92
 Residence Clemmons, Forsyth County, North Carolina NC Citizenship USA
 Post Office Address 4232 Lake Cliff Drive, Clemmons, North Carolina 27012

3-00

Full name of third joint inventor, if any James A. Smith
 Inventor's Signature *James A. Smith* Date 6/19/92
 Residence Allison Park, Allegheny County, Pennsylvania Pa Citizenship USA
 Post Office Address 3909 Ash Drive, Allison Park, Pennsylvania 15101

4-00

Full name of fourth joint inventor, if any Gregory Toto
 Inventor's Signature *Gregory Toto* Date 6/18/92
 Residence Santa Cruz, Santa Cruz County, California Ca Citizenship USA
 Post Office Address 815B Corcoran Avenue, Santa Cruz, California 95062

Full name of fifth joint inventor, if any _____
 Inventor's Signature _____ Date _____
 Residence _____ Citizenship _____
 Post Office Address _____



Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

FILING DATE

FIRST NAMED APPLICANT

ATTY DOCKET NO./TITLE

1970-1971 1932

[illegible]

9

92001-1

在图 1 中, 用虚线表示
用虚线表示, 用虚线表示, 用虚线表示, 用虚线表示, 用虚线表示,
用虚线表示, 用虚线表示, 用虚线表示, 用虚线表示, 用虚线表示,
用虚线表示, 用虚线表示, 用虚线表示, 用虚线表示, 用虚线表示,
用虚线表示, 用虚线表示, 用虚线表示, 用虚线表示, 用虚线表示,

DATE MAILED:

RECEIVED

JUN 30 1992:

APPLICATION BRANCH

A filing date has been granted to this application. However, the following parts are missing.

If all missing parts are filed within the period set below, the total amount owed by applicant as a

☐ large entity, ☒ small entity (verified statement filed), is \$ 6,000

1. ☐ The statutory basic filing fee is: ☐ missing ☐ insufficient. Applicant as a ☐ large entity ☐ small entity, must submit \$ _____ to complete the basic filing fee and **MUST ALSO SUBMIT THE SURCHARGE AS INDICATED BELOW.**
2. ☐ Additional claim fees of \$ _____ as a ☐ large entity ☐ small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due. **NO SURCHARGE IS REQUIRED FOR THIS ITEM.**
3. ☐ The oath or declaration:
☐ is missing.
☐ does not cover items omitted at time of execution.

An oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.

4. ☐ The oath or declaration does not identify the application to which it applies. An oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.
5. ☐ The signature to the oath or declaration is: ☐ missing; ☐ a reproduction; ☐ by a person other than the inventor or a person qualified under 37 CFR 1.42, 1.43, or 1.47. A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW..
6. ☒ The signature of the following joint inventor(s) is missing from the oath or declaration:
11/00000000 An oath or declaration listing the names of all inventors and signed by the omitted inventor(s), identifying this application by the above Application Number and Receipt Date is required. A SURCHARGE MUST ALSO BE SUBMITTED AS INDICATED BELOW.
7. ☐ The application was filed in a language other than English. Applicant must file a verified English translation of the application and a fee of \$30.00 under 37 CFR 1.17(k), unless this fee has already been paid. NO SURCHARGE IS RERQUIRED FOR THIS ITEM.
8. ☐ A \$50.00 processing fee is required for returned checks. (37 CFR 1.21(m)).
9. ☐ Your filing receipt was mailed in error because check was returned without payment.
10. ☐ Other.

An Application Number and Filing Date have been assigned to this application. The missing parts and fees identified above in items 1 and 3-6 must be timely provided **ALONG WITH THE PAYMENT OF A SURCHARGE of \$120.00 for large entities or \$60.00 for small entities** who have filed a verified statement claiming such status. The surcharge is set forth in 37 CFR 1.116(e). Applicant is given **ONE MONTH FROM THE DATE OF THIS LETTER, OR TWO MONTHS FROM THE FILING DATE** of this application, **WHICHEVER IS LATER**, within which to file all missing parts and pay any fees required above to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

Direct the response to, and any questions about, this notice to **ATTENTION: Application Division, Special Handling Unit.**

*A copy of this notice **MUST** be returned with response.*

For: Manager, Application Division
(703) 557-1112

1205

65.00 CK



236

8c
7/29/92
#

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :
SEAN McDONALD et al. : AN AUTOMATED SYSTEM
Serial No. 07/871,832 : FOR SELECTING AND
Filed April 21, 1992 : DELIVERING PACKAGES FROM
A STORAGE AREA

RECEIVED

INFORMATION DISCLOSURE STATEMENT
UNDER 37 C.F.R. §1.56

JUL 28 1992

GROUP 230

Pittsburgh, Pennsylvania 15219

July 21, 1992

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

Sir:

The above-identified patent application is a continuation-in-part of Serial No. 07/469,217, now abandoned. Applicants advise the Office that the only pertinent prior art of which they are aware was cited in the parent application or its corresponding European counterpart. A copy of the European search report and references there cited is enclosed.

Respectfully submitted,

BUCHANAN INGERSOLL, P.C.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on

July 21, 1992

Buchanan Ingersoll

By

Lynn J. Alstadt

Registration No. 29,362

Attorneys for Applicants

(412) 562-1632

SHEET 1 OF 1

FORM PTO-449
(Rev. 7-80)

U.S. Department of Commerce
Patent and Trademark Office

ATTY. DOCKET NO.
920015

SERIAL NO.
07/871,382

LIST OF PRIOR ART CITED BY APPLICANT
(Use several sheets if necessary)

APPLICANT
Sean McDonald et al.

FILING DATE
April 21, 1992

GROUP
3107

Part of Paper #4

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | IF APPROPRIATE |
|----------------------|--------------------|-------|-----------------|-------|----------|----------------|
| <i>FW</i> | AA 3,986,612 | 10/76 | Kamm et al. | 209 | 111.7 | |
| <i>FW</i> | AB 4,687,390 | 7/87 | Bonneton et al. | 414 | 282 | |
| | AC | | | | | |
| | AD | | | | | |
| | AE | | | | | |
| | AF | | | | | |
| | AG | | | | | |
| | AH | | | | | |
| | AI | | | | | |
| | AJ | | | | | |
| | AK | | | | | |

RECEIVED
JUL 28 1992
GROUP 230

FOREIGN PATENT DOCUMENTS

| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION | |
|-----------|--------------------|-------|---------|-------|----------|-------------|----|
| | | | | | | YES | NO |
| <i>FW</i> | AL 2 596 299 | 10/87 | French | — | — | | ✓ |
| <i>FW</i> | AM FR85/00232 | 8/84 | PCT | — | — | ✓ | |
| | AN | | | | | | |
| | AO | | | | | | |
| | AP | | | | | | |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|----|--|--|
| AR | | |
| AS | | |
| AT | | |

EXAMINER
F.E. Werner

DATE CONSIDERED
9/93

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with PEP 609. Draw line through question if not in conformance and not considered. Include copy of this form with next communication to applicant.

EUROPEAN PATENT
OFFICE
Branch at
The Hague
Search
Division

OFFICE EUROPEEN
DES BREVETS
Département à
La Haye
Division de la
recherche

☒ P.B.5818 Patentlaan, 2
2280 HV RIJSWIJK (ZH)
Pays-Bas / Netherlands / Niederlande

☒ Telex 31851
☒ (070) 340-20 40
☒ BREV PATENT



Jones, Michael Raymond
HASELTINE LAKE & CO.
Hazlitt House
28 Southampton Buildings
Chancery Lane
London WC2A 1AT
GRANDE BRETAGNE

| | |
|----------------------|-----------|
| HASELTINE LAKE & CO. | |
| ACKNOWLEDGEMENT | |
| REF | |
| 29 JUL 1991 | |
| ORIGINAL | FOR |
| COPY | DATA/DATE |



26. 07. 91

| | |
|-----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Zeichen/Ref./Réf. HL42220/000/MRJ | Anmeldung Nr./Application No./Demande n° // Patent Nr./Patent No./Brevet n° 91300543.5 - |
| Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire AUTOMATED HEALTHCARE, INC. | |

COMMUNICATION

The European Patent Office herewith transmits

- ☒ the European search report
- ☐ the declaration under Rule 45 of the European Patent Convention
- ☐ the partial European search report under Rule 45 of the European Patent Convention
- ☐ the supplementary European search report concerning the international application number

relating to the above-identified European patent application; copies of the documents cited in the search report are enclosed.

The Search Division approved the following items, as submitted by the applicant:

- ☒ Abstract ☒ Title ☐ Figure
- ☐ The abstract was modified by the Search Division and the definitive text is attached to the present communication.
- ☒ The following figure will be published with the abstract, since the Search Division considers that it better characterises the invention than the one indicated by the applicant.

Figure:

- ☐ Additional copy(ies) of the documents cited in the European search report.

REFUND OF THE SEARCH FEE

If applicable under Art.10 of the Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent to you later.



Re

EPO Form 1507 07.90

European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 91 30 0543

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int. Cl. 5) |
| X | US-A-4 678 390 (BONNETON) * Column 6, lines 50-57; column 10, lines 33-47; column 13, lines 46-54; column 16, lines 3-12; figures * | 1,19,20 | B 65 G 1/137 |
| Y | | 2,3,4,5 | |
| A | | ,8,18 | |
| | | 11,12, | |
| | | 21,22, | |
| | | 23 | |
| Y | FR-A-2 596 299 (COMPAGNIE GENERALE D'AUTOMATISME CGA-HBS) * Page 6, line 28 - page 13, line 19; figures * | 2,3,4,5 | |
| | | ,8,18 | |
| A | US-A-3 986 612 (KAMM) * Column 1, lines 32-46; figures * | 1,22 | |
| X | | 19 | |
| A | WO-A-8 601 386 (SOCIETE VYNEX) * Page 11, lines 3-13; figures * | 6,21 | |
| | | | TECHNICAL FIELDS SEARCHED (Int. Cl. 5) |
| | | | B 65 G G 06 F |
| The present search report has been drawn up for all claims | | | |
| Place of search THE HAGUE | | Date of completion of the search 26-06-1991 | Examiner OSTYN T.J.M. |
| CATEGORY OF CITED DOCUMENTS | | | |
| X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document | | T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons * : member of the same patent family, corresponding document | |

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 91 30 0543

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on 17/07/91
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|-------------------------------------------|---------------------|----------------------------|---------------------|
| US-A- 4678390 | 07-07-87 | EP-A, B 0235488 | 09-09-87 |
| FR-A- 2596299 | 02-10-87 | US-A- 4874281 | 17-10-89 |
| | | US-A- 4971513 | 20-11-90 |
| US-A- 3986612 | 19-10-76 | None | |
| WO-A- 8601386 | 13-03-86 | FR-A- 2569548 | 07-03-86 |
| | | AU-A- 4775185 | 24-03-86 |
| | | CA-A- 1240769 | 16-08-88 |
| | | DE-A- 3562863 | 30-06-88 |
| | | EP-A, B 0192690 | 03-09-86 |
| | | US-A- 4797819 | 10-01-89 |

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 3101 : PATENT APPLICATION
In re application of :
SEAN MCDONALD ET AL. : AN AUTOMATED SYSTEM
Serial No. 871,832 : FOR SELECTING AND
Filed April 21, 1992 : DELIVERING PACKAGES FROM A
STORAGE AREA

STATUS LETTER

Pittsburgh, Pennsylvania 15219

September 23, 1993

Hon. Commissioner of Patents and Trademarks
Washington, D. C. 20231

Sir:

Please advise us of the status of the above-identified
patent application.

Respectfully submitted,

Lynn J. Alstadt

Lynn J. Alstadt
Registration No. 29,362
BUCHANAN INGERSOLL, P.C.
56th Floor, 600 Grant Street
Pittsburgh, Pennsylvania 15219

(412) 562-1632

Status Letter
Expected date for
action on this application
with action of 10/93
Mo. _____ Yr. _____

Frank E. Werner

Examiner

FRANK E. WERNER
PRIMARY EXAMINER


**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

Sn07/871832

| SERIAL NUMBER | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|---------------|-------------|----------------------|---------------------|
|---------------|-------------|----------------------|---------------------|

07/12/93 McDONALD

 920015
EXAMINER

WERNER, F

F1M1/1015

 INVENTOR: J. J. J. J.
INVENTOR: J. J. J. J. PROFESSIONAL CORP.
2000 10th St. N.W.
Washington, D.C. 20001

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

 3107
DATE MAILED:

10/15/93

 This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

 A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|-----------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input checked="" type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input checked="" type="checkbox"/> <u>Status letter (Sept. 28, 1993)</u> |

Part II SUMMARY OF ACTION

- 1.
- ☒
- Claims
- 1-36
- are pending in the application.

 Of the above, claims 24-35 are withdrawn from consideration.

- 2.
- ☐
- Claims _____ have been cancelled.

- 3.
- ☐
- Claims _____ are allowed.

- 4.
- ☒
- Claims
- 1-23 and 36
- are rejected.

- 5.
- ☐
- Claims _____ are objected to.

- 6.
- ☒
- Claims
- 1-36
- are subject to restriction or election requirement.

- 7.
- ☐
- This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

- 8.
- ☐
- Formal drawings are required in response to this Office action.

- 9.
- ☐
- The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are
- ☐
- acceptable.
- ☐
- not acceptable (see explanation or Notice re Patent Drawing, PTO-948).

- 10.
- ☐
- The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been
- ☐
- approved by the examiner.
- ☐
- disapproved by the examiner (see explanation).

- 11.
- ☐
- The proposed drawing correction, filed on _____, has been
- ☐
- approved.
- ☐
- disapproved (see explanation).

- 12.
- ☐
- Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has
- ☐
- been received
- ☐
- not been received
-
- ☐
- been filed in parent application, serial no. _____; filed on _____.

- 13.
- ☐
- Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

- 14.
- ☐
- Other

EXAMINER'S ACTION

Serial No. 871832

-2-

Art Unit 317

-PART III-

1. Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1-23 and 36, drawn to a storage area (with X-Y coordinates, automated picking means and a computer subcombination, classified in Class 414, subclass 273.

II. Claims 24-35, drawn to a holding means, supply means, picking means and a computer combination, classified in Class 414, subclass 281.

2. The inventions are distinct, each from the other because of the following reasons:

3. Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations. (M.P.E.P. § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because at least base claim 1 (of the Group II invention) can have a non-gripping support picking means and can have the support rods in a non-X-Y arrangement. The subcombination has separate utility such as being utilized alone or in combinations.

4. Because these inventions are distinct for the reasons given

Serial No. 871832

-3-

Art Unit 317

above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

5. During a telephone conversation with Mr. Alstadt on Sept. 30, 1993 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-23 and 36. Affirmation of this election must be made by applicant in responding to this Office action. Claims 24-35 are withdrawn from further consideration by the Examiner, 37 C.F.R. § 1.142(b), as being drawn to a non-elected invention.

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

7. Claims 1-23 and 36 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A double inclusion of structure is present re "automated picking means "(claim 1, line 9), "a computer" (claim 1, line

Serial No. 871832

-4-

Art Unit 317

15), "storage area locations" (claim 1, lines 11 and 12), "a package" (claim 3, line 2), "automated picking means" (claim 9, line 6), and "in memory" (claim 21, line 24). No antecedent basis exists for "the first or second holding means" (claim 36, lines 8 and 9). Further, re claim 1, it is not understood what the storage area locations are structurally comprised of; also, no means has been claimed to move the picking means; lastly, it is not clear how the types are distinguished from each other. Re claims 9 and 10, no means has been set forth to move the supply station and it is not clear as to what the supply station is structurally comprised of.

8. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered

Serial No. 871832

-5-

Art Unit 317

therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

10. Claims 1, 7, 9, 10, 12-14, 22 and 23 are rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al.

Morello et al disclose storage areas 40, automated picking means 20, 62, etc. on tracks 98 (99) and computer means 16 to assign the package to X-Y coordinates (column 11, lines 11-17) and to control the picking means. It would have been obvious to have operated the system in the claimed manner. Re claim 9, note supply station 22. It would have been an obvious and conventional extension of Morello et al's matrix to have included a matrix supply station. Re claims 12 & 13, it would have been obvious to have programmed the computer in the claimed manner, if desired. Re claim 14, it would have been obvious to have included a conveyor to minimize manual intervention. Re claim 22, it would have been obvious to have handled medicine packages, if desired.

Re claim 10, the use of a conventional movable supply station to lend flexibility to the system would have been obvious.

11. Claims 3 & 2 are rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al as applied to claims 1, 7, 9, 10, 12-14, 22 and 23 above, and further in view of Boucher, Jr. et al

Serial No. 871832

-6-

Art Unit 317

or Pohjonen. Boucher, Jr. et al (62,64) or Pohjonen et al (Sa) disclose and render obvious the substitution of a vacuum head. Re claim 3, Boucher, Jr. et al (24,26) teach that it would have been obvious to have included a sensor for the package.

12. Claims 4-6 are rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al as applied to claims 1, 7, 9, 10, 12-14, 22 & 23 above, and further in view of O'Neil et al.

O'Neil et al (100,102, 97) teach and render obvious the use of a machine readable label to identify the contents. That the reader be conventionally attached to the gripper would have been obvious. Re claim 6, it would have been obvious to have included any relevant information on the label, including an expiration date.

13. Claims 8 & 11 are rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al as applied to claims 1, 7, 9, 10, 12-14, 22 & 23 above, and further in view of the European Patent.

It would have been obvious to have substituted rods and holes in the package as taught by the European Patent (1,15, etc.)

14. Claim 15 is rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al as applied to claims 1, 7, 9, 10, 12-14, 22 and 23 above, and further in view of Buttarazzi.

Buttarazzi (42,21,88,etc.) teach and render obvious the alternate use of containers (filled by picking means) placed on a

Serial No. 871832

-7-

Art Unit 317

conveyor. The use of conventional plural containers (as claimed) would have been obvious.

15. Claims 16-21 are rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al in view of Buttarazzi as applied to claim 15 above, and further in view of O'Neil et al or Henderson.

Re claim 16, it would have been obvious to have included a machine readable label as taught by O'Neil et al or Henderson (34). The use of a conventional check station (re claims 20 and 21) operating as claimed would have been obvious.

16. Claim 36 is rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al in view of Buttarazzi & O'Neil et al or Henderson as applied to claims 16-21 above, and further in view of the European Patent.

Note the obviousness discussion of the European Patent above. It would have been obvious to have conventionally accessed the rods in the claimed manner.

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F.E. Werner whose telephone number is (703) 308-1140.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

Summary:

Serial No. 871832

-8-

Art Unit 317

Claims 1-23 and 36 are rejected

Claims 24-35 are withdrawn

Rejection-SSP 3 mos.

Werner/oc
October 08, 1993
October 12, 1993

Frank E. Werner
FRANK E. WEHNER
PRIMARY EXAMINER 10/43
GROUP 3100

PTO FORM 948
(Rev 5-91)U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

ATTACHMENT TO PAPER NUMBER

5

APPLICATION NUMBER

871822

GROUP 3107

NOTICE OF DRAFTSMAN'S PATENT DRAWING REVIEW

The PTO Draftsman review all originally filed drawings regardless
of whether they were designated as informal or formal.The drawings filed 4/21/92A. ☐ are approved.B. ☒ are objected to under 37 CFR 1.84 for reason(s) checked below. The examiner will require submission of new, corrected drawings at the appropriate time. Corrected drawings must be submitted according to the instructions listed on the back of this Notice.

1. Paper and Ink. 37 CFR 1.84(a)

☐ Poor Quality Paper. Must Be White.
Transparent Paper Not Allowed.

Sheet(s) _____

2. Size of Sheet and Margins. 37 CFR 1.84(b)

Acceptable Paper Sizes and Margins

Paper Size

| Margin | 8 1/2 by 14 inches | 8 1/2 by 13 inches | DIN size A4 21 by 29.7 cm. |
|--------|--------------------|--------------------|-------------------------------|
| Top | 2 inches | 1 inch | 2.5 cm. |
| Left | 1/4 inch | 1/4 inch | 2.5 cm. |
| Right | 1/4 inch | 1/4 inch | 1.5 cm. |
| Bottom | 1/4 inch | 1/4 inch | 1.0 cm. |

☐ Proper Size Paper Required. All
Sheets Must be Same Size.

Sheet(s) _____

☐ Proper Margins Required.

Sheet(s) _____

☐ Top☐ Right☐ Left☐ Bottom

3. Character of Lines. 37 CFR 1.84(c)

☐ Lines Pale, Rough and Blurred, or
Jagged. Fig(s) _____☐ Solid Black Shading Not Allowed.

Fig(s) _____

4. ☐ Photographs Not Approved.☒ Comments:

- Remove box from around dws. figs 8-10

5. Hatching and Shading. 37 CFR 1.84(d)

☐ Shade Lines are Required.

Fig(s) _____

☐ Criss-Cross Hatching Not Allowed.

Fig(s) _____

☐ Double Line Hatching Not Allowed.

Fig(s) _____

☐ Parts in Section Must be Hatched
Properly. Fig(s) _____

6. Reference Characters. 37 CFR 1.84(f)

☐ Reference Characters Poor or Rough
and Blurred. Fig(s) _____☒ Minimum 1/8 inch (3.2 mm.) in height
is required. Fig(s) 8-10, 16-19☒ Figure Legends Poor or Placed outside of
Incorrectly. Fig(s) 19 dws.

7. Views. 37 CFR 1.84(i) & (j)

☐ Figures Must be Numbered Separately.☐ Figures Must Not be Connected
Fig(s) _____

8. Identification of Drawings. 37 CFR 1.84(l)

☐ Extraneous Matter or Copy Machine
Marks Not Allowed. Fig(s) _____9. ☐ Changes Not Completed from Prior
PTO-948 dated _____

Telephone inquiries concerning this review should be directed to the Chief Draftsman at telephone number (703) 557-6404.

Reviewing Draftsman_____
Date

TO SEPARATE, HOLD TOP AND BOTTOM EDGES, SNAP-APART AND DISCARD CARBON

| | | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------------------------|--------------|----------------------------------------|--------------------|------------------------------------------|----------------------------|----------------------------|--------------|
| FORM PTO-892 (REV. 2-92) | | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | | SERIAL NO. 07/871832 | GROUP/UNIT 3107 | ATTACHMENT TO PAPER NUMBER 5 | | | |
| NOTICE OF REFERENCES CITED | | | | APPLICANT(S) Sean C. McDonald et al | | | | | |
| U.S. PATENT DOCUMENTS | | | | | | | | | |
| * | | DOCUMENT NO. | DATE | NAME | CLASS | SUB-CLASS | FILING DATE IF APPROPRIATE | | |
| | A | 4896024 | 1-1990 | Morello et al | 414 | 274Xr | 10-19-87 | | |
| | B | 4789295 | 12-1988 | Boucher, Jr. et al | 414 | 280Xr | | | |
| | C | 5129777 | 7-1992 | Pohjonen et al | 414 | 280 | 12-24-90 6-30-87 | | |
| | D | 4812629 | 3-1989 | O'Neil et al | 414 | 274Xr | 4-23-87 3-6-85 | | |
| | E | 4546901 | 10-1985 | Buttaruzzi | 414 | 280Xr | | | |
| | F | 4786229 | 11-1988 | Henderson | 414 | 273Xr | | | |
| | G | 4792270 | 12-1988 | Yoshida | 414 | 273 | | | |
| | H | 4669047 | 5-1987 | Chveta | 414 | 331Xr | | | |
| | I | 4820109 | 4-1989 | Witt | 414 | 282 | 4-11-86 | | |
| | J | 4651863 | 3-1987 | Reuter et al | 414 | 280Xr | | | |
| | K | 3802580 | 4-1974 | Castaldi | 414 | 280Xr | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | | | |
| * | | DOCUMENT NO. | DATE | COUNTRY | NAME | CLASS | SUB-CLASS | PERTINENT SHTS. DWG. | PP. SPEC. |
| | L | 304 | 1-1979 | Pct | — | 414 | 273 | | |
| | M | | | | | | | | |
| | N | | | | | | | | |
| | O | | | | | | | | |
| | P | | | | | | | | |
| | Q | | | | | | | | |
| OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | | | |
| | R | | | | | | | | |
| | S | | | | | | | | |
| | T | | | | | | | | |
| | U | | | | | | | | |
| EXAMINER F.E. Uemer | | | DATE 9/93 | | | | | | |
| * A copy of this reference is not being furnished with this office action. (See Manual of Patent Examining Procedure, section 707.05 (a).) | | | | | | | | | |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT

In re application of: Sean McDonald et al.

Group No.: 3107

Serial No.: 07/871,832

Examiner: F. Werner

Filed: April 21, 1992

For: AN AUTOMATED SYSTEM FOR SELECTING PACKAGES FROM A STORAGE AREA

Commissioner of Patents and Trademarks
Washington, D.C. 20231

PETITION AND FEE FOR EXTENSION OF TIME (37 CFR 1.136(a))

1. This is a petition for an extension of time for a total period of one months:
(check and complete the applicable item below)

☒ to respond to the Office Letter mailed on 10/15/93
☐ for _____
(indicate matter being extended)

2. A response in connection with the matter for which this extension is requested:

☒ is filed herewith.
☐ has been filed.

3. Applicant is

☒ a small entity -- verified statement:
☐ attached.
☒ already filed.
☐ other than a small entity.

4. Calculation of extension fee

| | Total months requested | Fee for other than small entity | Fee for small entity |
|-------------------------------------|------------------------|---------------------------------|----------------------|
| <input checked="" type="checkbox"/> | one month | \$ 110.00 | \$ 55.00 |
| <input type="checkbox"/> | two months | \$ 360.00 | \$ 180.00 |
| <input type="checkbox"/> | three months | \$ 840.00 | \$ 420.00 |
| <input type="checkbox"/> | four months | \$1320.00 | \$ 660.00 |

050 KS 02/28/94 07871832

1 215

\$ 55.00 CK

050 KS 02/28/94 07871832

CERTIFICATE OF MAILING (37 CFR 1.8a)

1 215

\$ 55.00 CK

I hereby certify that this paper (along with any referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to the: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Angie F. Beyerl

Date: February 15, 1994

(Signature of person mailing paper)

(check and complete the next item, if applicable)

() An extension for _____ has already been secured and the fee paid therefore of \$ _____ is deducted from the total fee due for the total months of extension now requested.


Extension fee due with this request \$ _____


5. Fee Payment

(x) Attached is a check in the sum of \$ 55.00
() Charge fee to Account No. 02-4553 and for any additional extension fee required or credit for any excess fee paid. A duplicate of this petition is attached.

Reg. No.: 29,362

Tel. No.: 412-562-1632


Lynn J. Alstadt
Buchanan Ingersoll Professional Corporation
56th Floor, 600 Grant Street
Pittsburgh, Pennsylvania 15219

FEE APPLIED under 37 CFR 1.136(a)
EXTENSION OF TIME GRANTED
TO 2-15-98

CLERK, GROUP 310

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 3107 : PATENT APPLICATION
Examiner F. Werner :
In re application of : AN AUTOMATED SYSTEM
SEAN McDONALD et al. : FOR SELECTING PACKAGES
Serial No. 07/871,832 : FROM A STORAGE AREA
Filed April 21, 1992 :



8/a
3/7/94
at

RECEIVED
FEB 22 1994
GROUP 310

I hereby certify that this correspondence is being
delivered with the United States Postal Service or first
class mail in an envelope addressed to: Commissioner
of Patents and Trademarks, Washington, D.C. 20231,
on 2-15-94

Angie Beyer
SPECIAL AGENT IN CHARGE

AMENDMENT

Pittsburgh, Pennsylvania 15219

February 15, 1994

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

Sir:

Please amend the claims as follows:

1. (Amended) A system for selecting and delivering
packages from a [stored] storage area to fill orders comprising:
- a) a storage area comprised of a plurality of storage
area locations each location [being] having package
holding means sized and configured to hold [at least
one package] a plurality of individual packages each
individual package having a machine readable label
which identifies a type of package, the packages
being held in a manner so that [the] each package
can be placed into and removed from the storage area

an

u

locations [by automated picking means], each location having a distinct x, y coordinate;

b) automated picking means sized and configured to be able to hold packages, to select packages from the storage area locations and place packages in storage area locations in accordance with computer controlled instructions [received from a computer], the picking means having a gripper for grasping and moving individual packages;

AT c) means for moving the automated picking means to selected storage locations;

[c)] d) a computer having at least one memory which contains a program for directing the picking means to chosen storage area locations and a database containing at least one x, y coordinate location in the storage area for each package held within the storage area the computer being connected to the automated picking means and the means for moving the automated picking means [,]i and

e) a package reader associated with the picking means and being positioned for reading the machine readable labels on packages located within the storage area,

wherein only one type of package is stored in each x, y coordinate location.

In claim 3, line 2, change "a package" to -- the package --.

A2 ~~6.~~ (Amended) The system of claim 1 wherein the picking means contains ^{one} ~~a~~ picking means storage area for holding ^{the} ~~a~~ plurality of packages selected by the picking means.

A3 ~~8.~~ (Amended) The system of claim 1 also comprising a supply station for receiving new and returned packages, the supply station having a plurality of locations each location [being] having package holding means sized and configured to hold at least one package in a manner so that the package can be placed into and removed from the locations by the automated picking means, each location having a distinct x, y coordinate.

~~9.~~ (Amended) The system of claim ~~8~~ also comprising means for moving the supply station wherein the supply station is [movable and is sized to be] removably positioned adjacent the storage area.

~~10.~~ (Amended) The system of claim 1 wherein the package holding means in the storage area is comprised of a plurality of rods and a hole is provided in each package to permit the package to be held on the rods.

In claim 21, line 4, before "memory" insert -- the --.

Cancel claims 24-35

94 ~~20~~ (Amended) A system as described in claim ~~20~~¹⁸ wherein the picking means includes at least one gripper that picks the packages; and a tooling support structure having at least one column to support the tooling and at least one row to support the column such that the tooling means moves along the column as the column moves along the row to pick a given package hanging from a corresponding support rod, said gripper able to turn at least 180° on the column to pick packages [on either the first or second holding means] from selected storage locations which locations are positioned opposite and facing one another; and means for moving the column with respect to the row, said moving means controlled by [a] the computer and in communication therewith.

REMARKS

This is in response to the Office Action dated October 15, 1993. Applicants are submitting herewith a request for a one month extension of time along with the appropriate fee.

In the Office Action the Examiner repeated his requirement for restriction. Applicants confirm the provisional election of claims 1 thru 23 and 36. Therefore, claims 24 thru 35 were cancelled. Applicants also confirm that cancellation of the non-elected claims does not require a change of inventorship of the elected claims.

The Section 112 Rejections

The Examiner rejected claims 1, 3, 9 and 21 under Section 112 because of a perceived double inclusion of structure. Although applicants disagree with this conclusion, they have nevertheless amended the cited portions of these claims so that they can no longer be read to provide such double inclusion.

Claim 36 was amended to cure the antecedent basis problem cited by the Examiner. This amended claim also more clearly recites the movement of the gripper and relative positions of the selected packages.

Claims 1 and 9 have been amended to state that the storage locations or supply station locations have package holding means. As disclosed in the specification, such structure could be shelves or rods. Indeed, amended claim 11 specifies that the package holding means are rods.

New element c) has been added to claim 1 to specify means for moving the automated picking means. This change is in response to the Examiner's suggestion that such means should be included.

Amended claim 1 also specifies that the packages have machine readable labels which identify the type of package. That label could give package contents, expiration dates or other information useful for grouping or distinguishing among packages in the system.

Finally, claim 10 was amended to include means for moving the supply station.

Applicants submit that these amendments overcome the Section 112 rejections. Reconsideration of the claims as amended and withdrawal of the Section 112 rejections are respectfully requested.

The Section 113 Rejections

The pending claims have been rejected under Section 103 as obvious from United States Patent No. 4,896,024 to Morello et al. alone or in combination with patents to Boucher, Jr. et al. or Pohjonen et al. or O'Neil et al. or Buttarazzi or Henderson or the cited European application. Applicants have amended the pending claims to distinguish over these references. As amended, the claims now require that each storage location be capable of holding a plurality of packages, that each package have a machine readable label and that a package reader be associated with the picking means which reader is positioned for reading the machine readable labels on packages located within the storage area.

Morello et al. discloses an apparatus for dispensing and accepting the return of reusable articles such as videotapes. The reusable articles each have their own identification code, such as the 13 digit number illustrated in Figure 13. The apparatus has a housing containing a plurality of stationary locations each location being capable of holding a single reusable article therein and having its own location code. A computer and memory are provided for holding details of the location codes and article codes and controlling input and output

of information into and from the memory. A transfer assembly is utilized to remove individual articles from selected locations and return articles to selected locations. A central processing unit correlates the article identification code with the location code. As shown in Figures 3, 7, 8 and 9 and described at column 9, line 50 thru column 10, line 37, the system includes a picker assembly having a platen suitable for receiving the articles. The platen contains two generally parallel spaced apart plates mounted to a base plate. The plates define the location into which the selected article is positioned. A code sensor and reader is provided below the upper plate to read an article code on any article positioned above the base plate and between the two generally parallel plates. The teaching of Morello et al. is that the transfer assembly be sent to a specific location to select the desired article. The article is removed from the location into the picker assembly. There the identification code of the article is read. The picker assembly then delivers the article to a pick-up position. The picker assembly can also receive individual articles which have been placed at the gate mechanism 22. As disclosed, the picker assembly and the gate mechanism can handle only a single article at any given point in time. Similarly each storage location can accommodate a single article at any given point in time. This system relies upon the information in memory to direct the picker assembly to a selected location to find the desired article. When the picker assembly arrives at that location it cannot read the article

identification while the article remains in the storage location. This teaching is quite different from the system of amended claim 1. The claimed storage locations accommodate a plurality of packages and a package reader is positioned to read the package label while the package is in the storage location. Thus, this system does not rely solely upon the information in the computer memory to select articles from storage locations. Articles are removed from storage locations after the reader confirms that the desired article has been found. Consequently, the amount of false picks are substantially minimized. Furthermore, applicants' system is faster, since fewer wrong selections will be made. Both Morello's system and applicants' system can have memory errors or failures. Should there be an error in the memory or a crash, applicants' system can still operate using the package reader to locate desired packages. In contrast, should the Morello et al. system lose the stored information correlating package identification to individual locations, the system is inoperative until the memory has been totally reprogramed.

The Morello reference also does not teach or suggest the following elements of applicants' system: a vacuum head gripper (required by claim 2), a sensor attached to the picking means (claim 3), bar codes (claim 5), expiration dates on labels (claim 6), a storage area in the picking means for holding a plurality of packages (claim 7), storage rods for holding the packages (claims 8 and 11), a supply station which holds a plurality of packages (claim 9) and is movable (claim 10), a program for

checking compatibility of selected products (claim 13), a conveyor to carry selected packages (claim 14) or labeled containers holding selected packages (claims 16-19), a check station (claims 20 and 21) medicine packages (claim 22), or a track and column structure over which the picking means travels (claims 23 and 26). Consequently, the claims as amended are patentable over Morello.

O'Neil et al. teaches a method and apparatus for vending which has a plurality of storage positions that are accessed by a picking unit directed by a computer and microprocessor memory system. The picking unit travels over a horizontal bar which can move up and down on support posts. O'Neil teaches the use of mechanical fingers on a rotatable table device with a magnetic means for removing articles from the storage locations. Like Morello, O'Neil provides a package reader which can only read packages after they have been removed from the storage location. The picking unit may deliver the selected article to a removal location (Figure 1) or a conveyor (Figure 9). O'Neil also teaches that one article is positioned in each storage location (see Figure 1). Like Morello, the O'Neil device includes a return station 18. This station also accommodates only a single article at any given point in time. O'Neil does not teach or suggest the elements of applicants' claims 2, 3, 6, 7, 8, 9, 10, 11, 13 and 16 thru 23. Moreover, the bar and post arrangement used by O'Neil is significantly different from applicants' track and column system. Whereas, the O'Neil picking means can only

travel in a single plane, applicants' device can move in any x-y-z direction limited only by the track layout which can be any shape. O'Neil can only access one bank of storage locations whereas applicants' unit can access any number of banks of storage locations. Consequently, the O'Neil system is not suitable for many storage and access situations, such as a pharmacy, where hundreds or thousands of different packages are stored and selectively retrieved.

United States Patent No. 4,789,295 to Boucher et al. discloses an article manipulator for robots. That manipulator utilizes two vacuum cups for gripping articles. There is no disclosure of any type of storage locations beyond the positions of articles being held by the vacuum cups. Since it would be impractical to hold a separate article by each suction cup, this reference also teaches that only one article be held by the picking means at any point in time. Boucher's gripper does not include any type of package reader although it does utilize sensors for sensing the position of the article manipulator relative to an article (column 3, lines 3 thru 7). Boucher et al. also does not teach or suggest the elements of applicants' dependent claims 5 thru 23 and 36.

Pohjonen et al. also disclose a load handling method and system which utilizes a suction cup or an electromagnet for engaging articles. This patent teaches that articles are stored in boxes which are placed on and removed from a shelf. There is no teaching of the use of storage locations having x,y

coordinates which locations can receive a plurality of packages that can be separately selected. There is also no teaching of the elements required by claims 4 thru 13 and 15 thru 36.

United States Patent 4,546,901 to Buttarazzi discloses an apparatus for dispensing medication. The particular apparatus is essentially comprised of a plurality of pill dispensing units comprised of shelves containing bins of pills. The pills are individually blister packaged on a strip. The pill strips are withdrawn from the bins by a pair of gripping fingers supported on a carriage and placed on trays. A high speed conveyor transports the pills from the dispensing units to an inspection station. The carriage is mounted for transverse movement on a bar. The bar is attached transverse to a vertical column on which it moves up and down. This structure is very similar to that of O'Neil. Because the pill strips have been positioned in a precise predetermined location in the dispensing units, the dispensing carriage assemblies can be directed in advance to the locations of the desired medication. Like the other references, Buttarazzi does not teach storage locations which hold a plurality of individual packages each of which can be individually removed and replaced. Furthermore, no package reader is utilized by Buttarazzi which reader is positioned for reading machine readable labels on packages located within the storage locations. Buttarazzi also does not disclose a supply station for restocking the storage areas or the elements required by dependent claims 2 thru 14, 16 thru 23 and 36.

Henderson discloses a document storage retrieval system including a plurality of containers each having machine readable identifying indicia thereon. The disclosed containers are boxes of documents or ther articles. Each box is stored in a separate location "so that all of the articles or all articles or all of the documents are stored and retrieved as a unit." (Col. 4, lines 50-51). Thus, this system also does not permit storage of a plurality of packages in a single location such that individual packages may be retrieved and replaced. Like Morello and O'Neil each storage location contains only an individual container.

The cited European patent discloses a sorting machine wherein grippers support objects for attachment to a hook or a rail. This system does not rely upon a set of storage locations having distinct x,y coordinates. This reference was cited to show storage of packages on rods and removal of the packages from those rods. The storage system there disclosed is otherwise completely different from applicants' system.

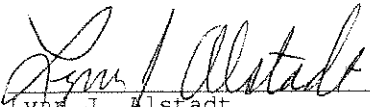
Clearly none of the cited references disclose the claimed system. Taken together the cited prior art does not teach or suggest a system in which a plurality of individually retrievable packages are stored in a single location. The cited retrieval systems also do not have machines for reading machine readable labels on a package while that package is in a storage location. Consequently, amended claim 1 is patentable over the cited references. The remaining claims depend directly or indirectly from claim 1. Therefore, those claims are also

patentable over the cited references. Additionally, there is no teaching or suggestion of a picking means having a storage area which will hold a plurality of articles selected by the picking means as required by claim 7. The prior art also does not teach or suggest a movable supply station which holds a plurality of packages which can be removed by the picking means and placed in storage locations as set forth in claims 9 and 10. None of the prior art systems utilize a program for checking compatibility among products in packages selected by the picking means for a given order (claim 13). The art does not teach the tooling support structure of claim 36 which can pick packages from either a first or second holding means located opposite one another.

For the foregoing reasons, applicants submit that the claims as amended are patentable over the prior art. Reconsideration and allowance of the claims as amended are respectfully requested.

Respectfully submitted,

BUCHANAN INGERSOLL, P.C.

By 
Lynn J. Alstadt
Registration No. 29,362

Attorneys for Applicant

(412) 562-1632

FORM PTO-1083

C Docket No.: 920015

In re application of: Sean McDonald et alSerial No.: 07/871,832Filed: April 21, 1992For: AN AUTOMATED SYSTEM FOR SELECTING PACKAGES FROM A STORAGE AREATHE COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, DC 20231

Sir:

Transmitted herewith is an amendment in the above-identified application.

- ☒ Small entity status of this application under 37 CFR 1.9 and 1.27 has been established by a verified statement previously submitted.
- ☐ A verified statement to establish small entity status under 37 CFR 1.9 and 1.27 is enclosed.
- ☒ No additional fee is required.

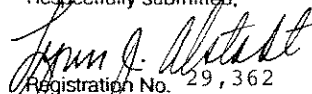
The fee has been calculated as shown below:

| | (Col. 1) | | (Col. 2) | | SMALL ENTITY | | | OTHER THAN A SMALL ENTITY | |
|-------------------------------------------|----------------------------------|-------|---------------------------------|---------------|------------------|------------|----|---------------------------|------------|
| | CLAIMS REMAINING AFTER AMENDMENT | | HIGHEST NO. PREVIOUSLY PAID FOR | PRESENT EXTRA | ADDIT. RATE | ADDIT. FEE | OR | ADDIT. RATE | ADDIT. FEE |
| Total | 24 | MINUS | 36 | 0 | x 11 = | \$ | OR | x 22 = | \$ |
| Indep | 2 | MINUS | 2 | 0 | x 37 = | \$ | OR | x 74 = | \$ |
| FIRST PRESENTATION OF MULTIPLE DEP. CLAIM | | | | | + 115 = | \$ | OR | + 230 = | \$ |
| | | | | | TOTAL ADDIT. FEE | \$ --- | OR | TOTAL | \$ |

- * If entry in Col. 1 is less than entry in Col. 2, write "0" in Col. 3.
- ** If the "Highest No. Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.
- *** If the "Highest No. Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.

- ☐ Please charge by Deposit Account No. 02-4553 the amount of \$ _____.
A duplicate copy of this sheet is attached.
- ☐ A check in the amount of \$ _____ is attached.
- ☒ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 02-4553. A duplicate copy of this sheet is attached.
- ☒ Any filing fees required under 37 CFR 1.16 for the presentation of extra claims.
- ☐ Any patent application processing fees under 37 CFR 1.17.

Respectfully submitted,



Registration No. 29,362
BUCHANAN INGERSOLL PROFESSIONAL CORPORATION
600 Grant Street, 56th Floor
Pittsburgh, PA 15219

(412) 562- 1632

RECEIVED
FEB 22 1994
MAIL ROOM
310



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

| | | | |
|---------------|-------------|----------------------|---------------------|
| SERIAL NUMBER | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|---------------|-------------|----------------------|---------------------|

| |
|----------|
| EXAMINER |
|----------|

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

DATE MAILED:

This is a communication from the examiner in charge of your application.
 COMMISSIONER OF PATENTS AND TRADEMARKS

- ☐ This application has been examined ☒ Responsive to communication filed on Feb. 17, 1994 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), 15 days from the date of this letter.
 Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-23 and 36 are pending in the application.
 Of the above, claims _____ are withdrawn from consideration.
2. ☒ Claims 24-35 have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-23 and 36 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with Informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved. ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

Serial No. 871832

-2-

Art Unit 317

-PART III-

1. Claims 1-23 and 36 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 1, "a storage area" (line 3), individual packages" (line 18) and "storage area locations" (line 15) are a double inclusion of structure. Re claim 4, this claim repeats all of the structure in base claim 1. Re claim 18, this claim repeats structure from claim 1, i.e. a, package with a machine readable label.

2. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered

Serial No. 871832

-3-

Art Unit 317

therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

4. Claims 1-7, 9, 10, 12-14, 22 and 23 are rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al in view of Boucher et al and Chucta.

Morello et al disclose storage areas 40, automated picking means 20, 62, etc. on tracks 98 (99) and computer means 16 to assign the package to X-Y coordinates (column 11, lines 11-17) and to control the picking means, but do not disclose a gripper which is disclosed by Boucher et al (62,64) and in view of the same, it would have been obvious to have substituted a gripper as taught by Boucher et al as this would have been the substitution of equivalent handling means productive of no unexpected result. Morello et al do not disclose the article's bar code being read prior to transfer from the storage area which is disclosed by Chucta (194,188,118,etc.) and in view of the same, it would have been obvious to have read the ^{barcode}~~code~~ prior to transfer to guarantee the correct article's selection prior to transfer as taught by Chucta. Re claim 2, Boucher, Jr. et al (62,64) disclose and render obvious the substitution of a vacuum head. Re claim 3, Boucher, Jr. et al (24,26) teach that it would have been obvious to have included a sensor for the package. Re claim 6, it would have been obvious to have included any relevant information on

Serial No. 871832

-4-

Art Unit 317

the label including an expiration date. Re claim 7, the inclusion of plural packages would have been obvious. Re claim 9, note supply station 22 of Morello et al. It would have been an obvious and conventional extension of Morello et al's matrix to have included a matrix supply station. Re claims 12 & 13, it would have been obvious to have programmed the computer in the claimed manner, if desired. Re claim 14, it would have been obvious to have included a conveyor to minimize manual intervention. Re claim 22, it would have been obvious to have handled medicine packages, if desired.

5. Claims 8 & 11 are rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al in view of Boucher et al and Chucta as applied to claims 1 to 7, 9, 10, 12-14, 22 & 23 above, and further in view of the European Patent.

It would have been obvious to have substituted rods and holes in the package as taught by the European patent (1,15,etc.)

6. Claims 15 to 21 are rejected under 35 U.S.C § 103 as being unpatentable over Morello et al in view of Boucher et al and Chucta 12-14, 22 and 23 above, and further in view of Buttarazzi.

Buttarazzi (42, 21, 88, etc.) teaches and renders obvious the alternate use of containers (filled by picking means) placed on a conveyor. The use of conventional plural containers (as claimed) would have been obvious.

Re claim 16, it would have been obvious to have included a

Serial No. 871832

-5-

Art Unit 317

machine readable label as taught by Chucta (34). The use of a conventional check station (re claims 20 and 21) operating as claimed would have been obvious.

7. Claim 36 is rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al in view of Boucher, Jr. et al, Chucta and as applied to claims 15-21 above, and further in view of the European Patent.

Note the obviousness discussion of the European Patent above. It would have been obvious to have conventionally accessed the rods in the claimed manner.

8. Applicant's arguments filed Feb. 17, 1994 have been fully considered but they are not deemed to be persuasive.

Re applicant's "Remarks" on the top of page 8, the same are not well-taken since the claimed subject matter, not the specification, is the measure of invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. In re Self, 213 USPQ 1,5 (CCPA 1982); In re Priest, 199 USPQ 11,15 (CCPA 1978). Re the "Remarks" on pages 10-12 concerning Boucher, Jr. et al, Buttarazzi and the European Patent, please note the application of the same in the above rejections.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

Serial No. 871832

-6-

Art Unit 317

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

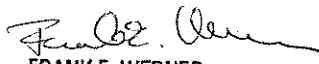
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F.E. Werner whose telephone number is (703) 308-1140.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

Summary:

Claims 1-23 and 36 are rejected.

Final Rejection-SSP 3 mos.


FRANK E. WERNER
PRIMARY EXAMINER 5/94
GROUP 3100

Werner/oc
May 16, 1994



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

| SERIAL NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKETT NO. |
|---------------|-------------|------------------------|----------------------|
| 07/87832 | 04/21/92 | San C. M. Donald et al | 920015 |

EXAMINER

F. E. Werner

ART UNIT PAPER NUMBER

3107

10

DATE MAILED:

EXAMINER INTERVIEW SUMMARY RECORD

All participants (applicant, applicant's representative, PTO personnel):

- (1) Mr. Alstadt (3) _____
(2) Mr. Werner (4) _____

Date of interview July 20, 1994

Type: ☐ Telephonic ☒ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description: _____

Agreement ☒ tentatively reached with respect to some or all of the claims in question. ☐ was not reached.

Claims discussed: at least claims 1, 4 and 18

Identification of prior art discussed: the art of record

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: in a continuing application, it was suggested that claim 1 be further amended to include that in a face-to-face relationship more than one package is suspended from the holding means prior to delivery of the package.

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

☐ 1. It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph below has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW (e.g., items 1-7 on the reverse side of this form). If a response to the last Office action has already been filed, then applicant is given one month from this interview date to provide a statement of the substance of the interview.

☐ 2. Since the examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the substance of the interview unless box 1 above is also checked.

Examiner's Signature

FRANK E. WERNER

PRIMARY EXAMINER 7/20/94

GROUP 3100


UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

Sho 7/871832

| SERIAL NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. |
|---------------|-------------|-----------------------|---------------------|
| 07/871,832 | 04/21/92 | MCDONALD | 6 920015 |

LYNN J. ALSTADT
 BUCHANAN INGERSOLL PROFESSIONAL CORP.
 56TH FLOOR, 600 GRANT ST.
 PITTSBURGH, PA 15219

FIM1/1026

| WERNER EXAMINER | |
|-----------------|--------------|
| ART UNIT | PAPER NUMBER |
| 3107 | 11 |

DATE MAILED:

10/26/94

NOTICE OF ABANDONMENT

This application is abandoned in view of:

- ☒ Applicant's failure to respond to the Office letter, mailed *10/26/94*.
- ☒ Applicant's letter of express abandonment which is in compliance with 37 C.F.R. 1.138. *
- ☐ Applicant's failure to timely file the response received _____ within the period set in the Office letter.
- ☐ Applicant's failure to pay the required issue fee within the statutory period of 3 months from the mailing date of _____ of the Notice of Allowance.
 - ☐ The issue fee was received on _____.
 - ☐ The issue fee has not been received in Allowed Files Branch as of _____.

In accordance with 35 U.S.C. 151, and under the provisions of 37 C.F.R. 1.316(b), applicant(s) may petition the Commissioner to accept the delayed payment of the issue fee if the delay in payment was unavoidable. The petition must be accompanied by the issue fee, unless it has been previously submitted, in the amount specified by 37 C.F.R. 1.17 (l), and a verified showing as to the causes of the delay.

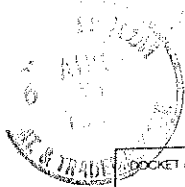
If applicant(s) never received the Notice of Allowance, a petition for a new Notice of Allowance and withdrawal of the holding of abandonment may be appropriate in view of *Deigar Inc. v. Schuyler*, 172 U.S.P.Q. 513.
- ☐ Applicant's failure to timely correct the drawings and/or submit new or substitute formal drawings by _____ as required in the last Office action.
 - ☐ The corrected and/or substitute drawings were received on _____.
- ☐ The reason(s) below.

* Expressly abandoned in favor of SN 08/295495 filed 8/25/94

Frank E. Werner
 FRANK E. WERNER
 PRIMARY EXAMINER *10/94*
 GROUP 3100

| PATENT APPLICATION FEE DETERMINATION RECORD | | | | | | Application or Docket Number | |
|--------------------------------------------------------------------------|----------------------------------|------------------------------------|---------------|------------|-----------------|-------------------------------------------------------|-----------|
| Effective December 16, 1991 | | | | | | 87/832 | |
| CLAIMS AS FILED - PART I | | | | | | SMALL ENTITY OR OTHER THAN SMALL ENTITY | |
| (Column 1) | | (Column 2) | | (Column 3) | | (Column 4) | |
| FOR | NUMBER FILED | NUMBER EXTRA | RATE | FEE | OR | RATE | FEE |
| BASIC FEE | | | | \$ 345.00 | OR | | \$ 690.00 |
| TOTAL CLAIMS | 36 | minus 20 = | * | 16 | OR | x \$20 = | |
| INDEPENDENT CLAIMS | 2 | minus 3 = | * | | OR | x 72 = | |
| MULTIPLE DEPENDENT CLAIM PRESENT | | | | + 110 = | OR | + 220 = | |
| * If the difference in column 1 is less than zero, enter "0" in column 2 | | | | TOTAL | OR | TOTAL | |
| 505 | | | | | | | |
| CLAIMS AS AMENDED - PART II | | | | | | SMALL ENTITY OR OTHER THAN SMALL ENTITY | |
| (Column 1) | | (Column 2) | | (Column 3) | | (Column 4) | |
| AMENDMENT A | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE | ADDI-TIONAL FEE | OR | RATE |
| Total | * | Minus | ** | x \$10 = | OR | x \$20 = | |
| Independent | * | Minus | *** | x 36 = | OR | x 72 = | |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM | | | | + 110 = | OR | + 220 = | |
| TOTAL | | | | OR | TOTAL | | |
| ADDIT. FEE | | | | | | | |
| (Column 1) | | (Column 2) | | (Column 3) | | (Column 4) | |
| AMENDMENT B | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE | ADDI-TIONAL FEE | OR | RATE |
| Total | * | Minus | ** | x \$10 = | OR | x \$20 = | |
| Independent | * | Minus | *** | x 36 = | OR | x 72 = | |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM | | | | + 110 = | OR | + 220 = | |
| TOTAL | | | | OR | TOTAL | | |
| ADDIT. FEE | | | | | | | |
| (Column 1) | | (Column 2) | | (Column 3) | | (Column 4) | |
| AMENDMENT C | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE | ADDI-TIONAL FEE | OR | RATE |
| Total | * | Minus | ** | x \$10 = | OR | x \$20 = | |
| Independent | * | Minus | *** | x 36 = | OR | x 72 = | |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM | | | | + 110 = | OR | + 220 = | |
| TOTAL | | | | OR | TOTAL | | |
| ADDIT. FEE | | | | | | | |

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
 ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
 *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.



#399.00 - 201-1/2wc
08 295495

| | | | |
|--------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------|-------------------------|
| POCKET NUMBER 920015 | ANTICIPATED CLASSIFICATION OF THIS APPLICATION: CLASS SUBCLASS | PRIOR APPLICATION: EXAMINER Frank E. Werner | ART UNIT 3107 |
|--------------------------------|-------------------------------------------------------------------------|----------------------------------------------------------|-------------------------|

Address to:

Commissioner of Patents and Trademarks
Box FWC
Washington, DC 20231

This is a Request for filing a ☐ continuation-in-part ☒ continuation ☐ divisional application under 37 CFR 1.62 of prior application Serial No. 07/871,832 filed on April 21, 1992 entitled AN AUTOMATED SYSTEM FOR SELECTING by the following named inventor(s).
PACKAGES FROM A STORAGE AREA

| | | | |
|-------------------------|---------------------|--------------------------|--------------------------|
| FULL NAME OF INVENTOR | FAMILY NAME | FIRST GIVEN NAME | SECOND GIVEN NAME |
| RESIDENCE & CITIZENSHIP | CITY | STATE OR FOREIGN COUNTRY | COUNTRY OF CITIZENSHIP |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | STATE & ZIP CODE/COUNTRY |
| FULL NAME OF INVENTOR | FAMILY NAME | FIRST GIVEN NAME | SECOND GIVEN NAME |
| RESIDENCE & CITIZENSHIP | CITY | STATE OR FOREIGN COUNTRY | COUNTRY OF CITIZENSHIP |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | STATE & ZIP CODE/COUNTRY |
| FULL NAME OF INVENTOR | FAMILY NAME | FIRST GIVEN NAME | SECOND GIVEN NAME |
| RESIDENCE & CITIZENSHIP | CITY | STATE OR FOREIGN COUNTRY | COUNTRY OF CITIZENSHIP |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | STATE & ZIP CODE/COUNTRY |

The above identified prior application in which no payment in the issue fee, abandonment of, or termination of proceedings has occurred, is hereby expressly abandoned as of the filing date of this new application. Please use all the contents of the prior application file wrapper, including the drawings, as the basic papers for the new application. (note: 37 CFR 1.60 may be used for applications where the prior application is not to be abandoned.)

- ☐ Enter the amendment previously filed on 1 under 37 CFR 1.116 but unentered, in the prior application.
- ☐ A preliminary amendment is enclosed.

The filing fee is calculated on the basis of the claims existing in the prior application as amended at 1 and 2 above

| Claims | (1) For | (2) Number filed | (3) Number extra | (4) Rate | (5) Calculations |
|-------------------------------------------|---------|------------------|----------------------------------------------------------------------------------------------------------------------|----------|------------------|
| Total Claims | | 24 - 20 = | 4 | X \$ 22 | 201 \$88 15.00 |
| Independent Claims | | 2 - 3 = | 0 | X \$ 74 | |
| Multiple Dependent Claims (if applicable) | | | | + \$ 230 | |
| | | | Basic Fee | | + \$ 710 |
| | | | Total of above Calculations = | | \$ 798 |
| | | | Reduction by 1/2 for filing by small entity (Note 37 CFR 1.9 1.27 1.28; if applicable, affidavit must be filed also) | | - \$ 399 |
| | | | Total National Fee | | \$ 399 |

- 3 ☐ The Commissioner is hereby authorized to charge fees under 37 CFR 1.16 and 1.17 which may be required, or credit any overpayment to Deposit Account No. 02-4553
- 4 ☒ A check in the amount of \$ 384.00 plus \$ 15.00 is enclosed.
- 5 ☐ A new oath or declaration is included since ☐ this application is a continuation-in-part which discloses and claims additional matter. ☐ correction of inventorship is being made.
- 6 ☒ Amend the specification by inserting before the first line the sentence:

B1 dw This application is a ☐ continuation-in-part, ☒ continuation, ☐ division, of application Serial No. 07/871,832 filed April 21, 1992 *as amended which is a C-2-P.O.S. 5.02/4.821716.1/4/10, and as amended*

- 7 ☒ Small entity status is still proper in view of the verified statement filed in the parent application Serial No 07/871,832 filed on April 21, 1992
- 8 ☐ Priority of application Serial No. filed on in is claimed under 35 U.S.C. 119.
- 9 ☒ The prior application is assigned of record to Automated Healthcare, Inc.,
261 Kappa Drive, Pittsburgh, Pennsylvania 15238
- 10 ☒ The power of attorney in the prior application is to: Lynn J. Alstadt, Esq.
600 Grant Street, Pittsburgh, Pennsylvania 15219
- 11 ☒ Also enclosed is an Information Disclosure Statement

Address all future communications to: (May only be completed by applicant, or attorney or agent of record)

Lynn J. Alstadt, Esq.

Buchanan Ingersoll, P.C.

600 Grant Street, 56th Floor
Pittsburgh, Pennsylvania 15219

It is understood that secrecy under 35 U.S.C. 122 is hereby waived to the extent that if information or access is available to any one of the applications in the file wrapper of a 37 CFR 1.62 application, be it either this application or a prior application in the same file wrapper, the Patent and Trademark Office may provide similar information or access to all the other applications in the same file wrapper.


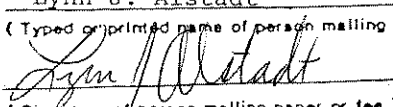
August 25, 1994

Date

Lynn J. Alstadt
Signature

- ☐ inventor(s)
☐ assignee of complete interest
☒ attorney or agent of record
☐ filed under §1.34(a)

| | | | |
|-------------------------|-------------------------------------------|--------------------------------------------------|-------------------------------------------|
| FULL NAME OF INVENTOR | FAMILY NAME Toto <i>f-o</i> | FIRST GIVEN NAME Gregory | SECOND GIVEN NAME |
| RESIDENCE & CITIZENSHIP | CITY Santa Cruz | STATE OR FOREIGN COUNTRY California <i>Ca</i> | COUNTRY OF CITIZENSHIP United |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS 815B Corcoran Ave. | CITY Stata Cruz | STATE & ZIP CODE/COUNTRY CA 95062, USA |
| FULL NAME OF INVENTOR | FAMILY NAME | FIRST GIVEN NAME | SECOND GIVEN NAME |
| RESIDENCE & CITIZENSHIP | CITY | STATE OR FOREIGN COUNTRY | COUNTRY OF CITIZENSHIP |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | STATE & ZIP CODE/COUNTRY |
| FULL NAME OF INVENTOR | FAMILY NAME | FIRST GIVEN NAME | SECOND GIVEN NAME |
| RESIDENCE & CITIZENSHIP | CITY | STATE OR FOREIGN COUNTRY | COUNTRY OF CITIZENSHIP |
| POST OFFICE ADDRESS | POST OFFICE ADDRESS | CITY | STATE & ZIP CODE/COUNTRY |

| CERTIFICATE OF MAILING BY "EXPRESS MAIL" UNDER 37 CFR 1.10 - SEPARATE PAPER - | | ATTORNEY'S DOCKET NO. 920015 | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------|-----------------------------------------------------------------------|-------|
|  | | | | |
| | | | IN RE APPLICATION OF Sean C. McDonald et al | |
| | | | SERIAL NUMBER | FILED |
| | | | FOR AN AUTOMATED SYSTEM FOR SELECTING PACKAGES FROM A STORAGE AREA | |
| GRP. ART UNIT 3107 | EXAMINER Frank E. Werner | | | |
| <p>"Express Mail" mailing label number <u>B 188 307 92Y</u></p> <p>Date of deposit <u>August 25, 1994</u></p> <p>I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.</p> <p><u>Lynn J. Alstadt</u> (Typed or printed name of person mailing paper or fee)  (Signature of person mailing paper or fee)</p> | | | | |

08 295495



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 3107

;

Examiner Frank E. Werner

: AN AUTOMATED SYSTEM
FOR SELECTING PACKAGES

In re application of

: FROM A STORAGE AREA

SEAN McDONALD et al.

:

INFORMATION DISCLOSURE STATEMENT

Pittsburgh, Pennsylvania 15219

August 25, 1994

Hon. Commissioner of Patents and Trademarks


Washington, D.C. 20231

Sir:

The most pertinent prior art known to applicants has been cited in the parent application Serial No. 07/871,832, filed April 21, 1992. Form PTO 1449 listing that prior art is attached hereto. Pursuant to 37 C.F.R. 1.98(d) no copy of these references are submitted herewith.

Respectfully submitted,

BUCHANAN INGERSOLL, P.C.

By 
Lynn J. Aistadt
Registration No. 29,362

Attorneys for Applicants

(412) 562-1632

SHEET 1 OF 1

| | | | | | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|------------------------------------------------------------|---------|------------------------------------------|----------|-----------------------|--|
| FORM PTO-1449 (Rev. 7-80) | | U.S. Department of Commerce Patent and Trademark Office | | ATTY DOCKET NO. 920015 | | SERIAL NO. | |
| LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary) | | | | APPLICANT Sean McDonald et al. | | | |
| | | | | FILING DATE | | GROUP | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| *EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | IF APPROPRIATE | |
| | AA | 3,986,612 | 10/76 | Kamm et al. | 209 | 111.7 | |
| | AB | 4,687,390 | 7/87 | Bonneton et al. | 414 | 282 | |
| | AC | | | | | | |
| | AD | | | | | | |
| | AE | | | | | | |
| | AF | | | | | | |
| | AG | | | | | | |
| | AH | | | | | | |
| | AI | | | | | | |
| | AJ | | | | | | |
| | AK | | | | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | |
| | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION YES NO | |
| | AL | 2 596 299 | 10/87 | French | | | |
| | AM | FR85/00232 | 8/84 | PCT | | | |
| | AN | | | | | | |
| | AO | | | | | | |
| | AP | | | | | | |
| OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | |
| | AR | | | | | | |
| | AS | | | | | | |
| | AT | | | | | | |
| EXAMINER | | | | DATE CONSIDERED | | | |
| <small>* EXAMINER. Initial if reference considered, whether or not citation is in conformance with PEP 609. Draw line through question if not in conformance and not considered. Include copy of this form with next communication to applicant.</small> | | | | | | | |


**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

| SERIAL NUMBER | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|---------------|-------------|----------------------|---------------------|
|---------------|-------------|----------------------|---------------------|

08/295,495 08/25/94 McDONALD

EXAMINER

WERNER, F

FIM1/1104

 LYNN J. ALSTADT
BUCHANAN INGERSOLL
600 GRANT STREET, 56TH FLOOR
PITTSBURGH, PA 15219

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

DATE MAILED: 3107

11/04/94

 This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application is responsive to communication filed on Feb. 17, 1994 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input type="checkbox"/> Notice re Patent Drawing, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, Form PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-23 and 36 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☒ Claims 24-35 have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-23 and 36 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable. ☐ not acceptable (see explanation or Notice re Patent Drawing, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____ has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed on _____, has been ☐ approved. ☐ disapproved (see explanation).
12. ☐ Acknowledgment is made of the claim for priority under U.S.C. 119. The certified copy has ☐ been received ☐ not been received
☐ been filed in parent application, serial no. _____; filed on _____
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to this merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☒ Other The preamendment of Aug. 25, 1994 has been entered.

EXAMINER'S ACTION

Serial No. 295495

-2-

Art Unit 317

1. Claims 1-23 and 36 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 1, "a storage area" (line 3), individual packages" (line 18) and "storage area locations" (line 15) are a double inclusion of structure. Re claim 4, this claim repeats all of the structure in base claim 1. Re claim 18, this claim repeats structure from claim 1, i.e. a package with a machine readable label.

2. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out

Serial No. 295495

-3-

Art Unit 317

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.

4. Claims 1-7, 9, 10, 12-14, 22 and 23 are rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al in view of Boucher et al and Chucta.

Morello et al disclose storage areas 40, automated picking means 20, 62, etc. on tracks 98 (99) and computer means 16 to assign the package to X-Y coordinates (column 11, lines 11-17) and to control the picking means, but do not disclose a gripper which is disclosed by Boucher, Jr. et al (62,64) and in view of the same, it would have been obvious to have substituted a gripper as taught by Boucher, Jr. et al as this would have been the substitution of equivalent handling means productive of no unexpected result. Morello et al do not disclose the article's bar code being read prior to transfer from the storage area which is disclosed by Chucta (194,188,118,etc.) and in view of the same, it would have been obvious to have read the barcode prior to transfer to guarantee the correct article's selection prior to transfer as taught by Chucta. Re claim 2, Boucher Jr. et al (62,64) disclose and render obvious the substitution of a vacuum head. Re claim 3, Boucher, Jr. et al (24,26) teach that it would have been obvious to have included a sensor for the package. Re claim 6, it would have been obvious to have included any relevant information on the label including an expiration date. Re claim

Serial No. 295495

-4-

Art Unit 317

7, the inclusion of plural packages would have been obvious. Re claim 9, note supply station 22 of Morello et al. It would have been an obvious and conventional extension of Morello et al's matrix to have included a matrix supply station. Re claims 12 & 13, it would have been obvious to have programmed the computer in the claimed manner, if desired. Re claim 14, it would have been obvious to have included a conveyor to minimize manual intervention. Re claim 22, it would have been obvious to have handled medicine packages, if desired.

5. Claims 8 and 11 are rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al in view of Boucher and Chucta et al as applied to claims 1-7, 9, 10, 12-14, 22 and 23 above, and further in view of the European Patent.

It would have been obvious to have substituted rods and holes in the package as taught by the European patent (1,15,etc.).

6. Claims 15-21 are rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al in view of Boucher, Jr. et al and Chucta as applied to claims 1-7, 9, 10, 12-14, 22 and 23 above, and further in view of Buttarazzi.

Buttarazzi (42, 21, 88, etc.) teaches and renders obvious the alternate use of containers (filled by picking means) placed on a conveyor. The use of conventional plural containers (as claimed) would have been obvious.

Serial No. 295495

-5-

Art Unit 317

Re claim 16, it would have been obvious to have included a machine readable label as taught by Chucta (34). The use of a conventional check station (re claims 20 and 21) operating as claimed would have been obvious.

7. Claim 36 is rejected under 35 U.S.C. § 103 as being unpatentable over Morello et al in view of Boucher, Jr. et al and Buttarazzi as applied to claims 15-21 above, and further in view of the European Patent.

Note the obviousness discussion of the European Patent above. It would have been obvious to have conventionally accessed the rods in the claimed manner.

8. Applicant's arguments filed Feb. 17, 1994 have been fully considered but they are not deemed to be persuasive.

Re applicant's "Remarks" on the top of page 8, the same are not well-taken since the claimed subject matter, not the specification, is the measure of invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. In re Self, 28 USPQ 1,5 (CCPA 1982); In re Priest, 199 USPQ 11,15 (CCPA 1978). Re the "Remarks" on pages 10-12 concerning Boucher, Jr. et al, Buttarazzi and the European Patent, please note the application of the same in the above rejections.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to F.E. Werner whose telephone number is (703) 308-1140.

Serial No. 295495

-6-

Art Unit 317

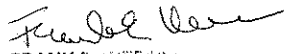
Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

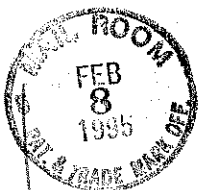
Summary:

Claims 1-23 and 36 are rejected.

Rejection-SSP 3 mos.

Werner/oc
November 03, 1994


FRANK E. WERNER
PRIMARY EXAMINER 11/94
GROUP 3100



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

 14/C Ekt
 6/13/95
 RECEIVED
 FEB 13 1995
 GROUP 310

Group Art Unit 3107 : PATENT APPLICATION

Examiner F. Werner :

In re application of : AN AUTOMATED SYSTEM
FOR SELECTING PACKAGES

SEAN McDONALD et al. : FROM A STORAGE AREA

Serial No. 08/295,495 :

Filed August 25, 1994 :

I hereby certify that this correspondence is being
 deposited with the United States Patent and Trademark Office as that
 date first in an envelope addressed to: Commissioner
 of Patents and Trademarks, Washington, D.C. 20231,
 on

AMENDMENT

February 6, 1995
 Sean McDonald

Pittsburgh, Pennsylvania 15219

February 6, 1995

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

Sir:

Please amend the claims as follows:

1. (Amended) A system for selecting and delivering
 packages [from a storage area] to fill orders comprising:

- a) a storage area comprised of a plurality of storage
 area locations each location having package holding
 means sized and configured to hold a plurality of
 individual packages each individual package having a
 machine readable label which identifies a type of
 package, the packages being held in a manner so that
 each package can be placed into and removed from the
 storage area locations and so that the machine

readable label on at least one package in a storage location can be read without removing the package from the storage location, each location having a distinct x, y coordinate;

- 9
- b) automated picking means sized and configured to be able to hold packages, to select packages from the storage area locations and place packages in the storage area locations in accordance with computer controlled instructions, the picking means having a gripper for grasping and moving [individual] the packages and having a picking means storage location sized and configured to hold a plurality of packages in a face to face relationship after the plurality of packages have been retrieved from the storage area and prior to delivery of the plurality of packages to a desired destination separate from the picking means;
 - c) means for moving the automated picking means to selected storage locations;
 - d) a computer having at least one memory which contains a program for directing the picking means to chosen storage area locations and a database containing at least one x, y coordinate location in the storage area for each package held within the storage area the computer being connected to the automated picking means and the means for moving the automated picking means; and

9 e) a package reader associated with the picking means and being positioned for reading the machine readable labels on packages located within the storage area, wherein only one type of package is stored in each x, y coordinate location.

Cancel claims ~~4 and 18~~.

REMARKS

This is in response to the Office Action dated November 4, 1994.

The Section 112 Rejections

The Examiner rejected all pending claims under Section 112 because of a perceived double inclusion of structure. Claim 1 has been amended and claims 4 and 18 were cancelled to overcome the problem. Reconsideration of the claims as amended and withdrawal of the Section 112 rejections are, therefore, respectfully requested.

The Section 103 Rejections

The pending claims have been rejected under Section 103 as obvious from United States Patent No. 4,896,024 to Morello et al. in combination with patents to Boucher, Jr. et al. or Chucta or Buttarazzi or the cited European application. Applicants have amended claim 1 to require that the picking means have a picking means storage location capable of holding a plurality of packages

after those packages have been retrieved from the storage area and prior to delivery to a location separate from the picking means. This change is consistent with the suggestion made by the Examiner in an interview dated July 20, 1994, in the parent application.

Morello et al. discloses an apparatus for dispensing and accepting the return of reusable articles such as videotapes. The apparatus has a housing containing a plurality of stationary locations each location being capable of holding a single reusable article therein and having its own location code. A transfer assembly is utilized to remove individual articles from selected locations and return articles to selected locations. As shown in Figures 3, 7, 8 and 9 and described at column 9, line 50 thru column 10, line 37, the Morello system includes a picker assembly having a platen suitable for receiving a selected article. The platen contains two generally parallel spaced apart plates mounted to a base plate. The plates define the location into which the selected article is positioned. The teaching of Morello et al. is that the transfer assembly be sent to a specific location to select one desired article stored in that location. The article is removed from the location into the picker assembly. There the identification code of the article is read. The picker assembly then delivers the article to a pick-up position. The picker assembly can also receive individual articles which have been placed at the gate mechanism 22. As disclosed, the picker assembly and the gate mechanism can handle only a single article at any given point in time. Similarly each storage location can

accommodate a single article at any given point in time. This system relies upon the information in memory to direct the picker assembly to a selected location to find the desired article. When the picker assembly arrives at that location it cannot read the article identification while the article remains in the storage location. This teaching is quite different from the system of amended claim 1. Both the claimed storage locations and the picking means can accommodate a plurality of packages. A package reader is positioned to read the package label while the package is in the storage location. Thus, this system does not rely solely upon the information in the computer memory to select articles from storage locations. Articles are removed from storage locations after the reader confirms that the desired article has been found. Consequently, the amount of false picks are substantially minimized. Furthermore, applicants' system is faster, since fewer wrong selections will be made. Both Morello's system and applicants' system can have memory errors or failures. Should there be an error in the memory or a crash, applicants' system can still operate using the package reader to locate desired packages. In contrast, should the Morello et al. system lose the stored information correlating package identification to individual locations, the system is inoperative until the memory has been totally reprogrammed.

The Morello reference also does not teach or suggest the following elements of applicants' system: a vacuum head gripper (required by claim 2), a sensor attached to the picking means

(claim 3), bar codes (claim 5), expiration dates on labels (claim 6), a storage area in the picking means for holding a plurality of packages (claim 7), storage rods for holding the packages (claims 8 and 11), a supply station which holds a plurality of packages (claim 9) and is movable (claim 10), a program for checking compatibility of selected products (claim 13), a conveyor to carry selected packages (claim 14) or labeled containers holding selected packages (claims 16-19), a check station (claims 20 and 21) medicine packages (claim 22), or a track and column structure over which the picking means travels (claims 23 and 26). Consequently, the claims as amended are patentable over Morello.

Chutca discloses an automated parts supply system in which a computer controlled guided vehicle carries one or more modules holding several trays. Each tray contains several parts. Each module and each tray has a machine readable label. The vehicle is operated by a computer to deliver trays of parts to work stations. A transfer mechanism is provided to remove trays from the module and replace those trays into the module. Thus, this system moves and tracks only trays of parts, not individual parts. Neither the parts nor the trays are stored on the vehicle in a face-to-face relationship. Additionally, only a single container is held at each storage location within the system. In contrast, the system of claim 1 contains storage locations in which a plurality of machine readable labeled packages are kept. Additionally, the selected package of applicants' system are then held in a face-to-face relationship on the picking means. Thus, Chutca in

combination with Morello does not teach or suggest the system of claim 1 as here amended.

United States Patent No. 4,789,295 to Boucher et al. discloses an article manipulator for robots. That manipulator utilizes two vacuum cups for gripping articles. There is no disclosure of any type of storage location beyond the positions of articles being held by the vacuum cups. Since it would be impractical to hold a separate article by each suction cup, this reference also teaches that only one article be held by the picking means at any point in time. Boucher's gripper does not include any type of package reader although it does utilize sensors for sensing the position of the article manipulator relative to an article (column 3, lines 3 thru 7). Boucher et al. also does not teach or suggest the elements of applicants' dependent claims 5 thru 23 and 36.

United States Patent 4,546,901 to Buttarazzi discloses an apparatus for dispensing medication. The particular apparatus is essentially comprised of a plurality of pill dispensing units comprised of shelves containing bins of pills. The pills are individually blister packaged on a strip. The pill strips are withdrawn from the bins by a pair of gripping fingers supported on a carriage and placed on trays. A high speed conveyor transports the pills from the dispensing units to an inspection station. The carriage is mounted for transverse movement on a bar. The bar is attached transverse to a vertical column on which it moves up and down. Because the pill strips have been positioned in a precise

predetermined location in the dispensing units, the dispensing carriage assemblies can be directed in advance to the locations of the desired medication. Like the other references, Buttarazzi does not teach storage locations which hold a plurality of individual packages each of which can be individually removed and replaced. Furthermore, no package reader is utilized by Buttarazzi which reader is positioned for reading machine readable labels on packages located within the storage locations. Buttarazzi also does not disclose a supply station for restocking the storage areas or the elements required by dependent claims 2, 3, 5 thru 14, 16, 17, 19 thru 23 and 36.

The cited European patent discloses a sorting machine wherein grippers support objects for attachment to a hook or a rail. This system does not rely upon a set of storage locations having distinct x,y coordinates. This reference was cited to show storage of packages on rods and removal of the packages from those rods. The storage system there disclosed is otherwise completely different from applicants' system.


Clearly, none of the cited references disclose the claimed system. Taken together the cited prior art does not teach or suggest a system in which a plurality of individually retrievable packages can be stored in a single storage location and in a single picking means storage location. Consequently, amended claim 1 is patentable over the cited references. The remaining claims depend directly or indirectly from claim 1. Therefore, those claims are also patentable over the cited references. The prior art also does

not teach or suggest a movable supply station which holds a plurality of packages which can be removed by the picking means and placed in storage locations as set forth in claims 9 and 10. None of the prior art systems utilize a program for checking compatibility among products in packages selected by the picking means for a given order (claim 13). The art does not teach the tooling support structure of claim 36 which can pick packages from either a first or second holding means located opposite one another.

For the foregoing reasons, applicants submit that the claims as amended are patentable over the prior art. Reconsideration and allowance of the claims as amended are respectfully requested.

Respectfully submitted,

BUCHANAN INGERSOLL, P.C.

By 
Lynn J. Alstadt
Registration No. 29,362

Attorneys for Applicant

(412) 562-1632



UNITED STATES DEPARTMENT OF COMMERCE
 Patent and Trademark Office
 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231

| SERIAL NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. |
|---------------|-------------|-----------------------|---------------------|
|---------------|-------------|-----------------------|---------------------|

08/295,495 08/25/94 McDONALD

S 920015

EXAMINER

WERNER, F

F1M1/0307

ART UNIT

PAPER NUMBER

15

LYNN J. ALSTADT
 BUCHANAN INGERSOLL
 600 GRANT STREET, 56TH FLOOR
 PITTSBURGH, PA 15219

DATE MAILED: 07

EXAMINER INTERVIEW SUMMARY RECORD

03/07/95

All participants (applicant, applicant's representative, PTO personnel):

(1) Mr. Alstadt (3) _____

(2) Exmr. Werner (4) _____

Date of Interview 3/3/95

Type: ☒ Telephonic ☐ Personal (copy is given to ☐ applicant ☒ applicant's representative).

Exhibit shown or demonstration conducted: ☐ Yes ☒ No. If yes, brief description: _____

Agreement ☒ was reached with respect to some or all of the claims in question. ☐ was not reached.

Claims discussed: 5, 6, 19 and 20

Identification of prior art discussed: _____

Description of the general nature of what was agreed to if an agreement was reached, or any other comments: it was agreed that claims 5 and 6 be made dependent on claim 1 and that claims 19 and 20 be made dependent on claim 15 and this has been done by the Examiner

(A fuller description, if necessary, and a copy of the amendments, if available, which the examiner agreed would render the claims allowable must be attached. Also, where no copy of the amendments which would render the claims allowable is available, a summary thereof must be attached.)

☒ 1. It is not necessary for applicant to provide a separate record of the substance of the interview.

Unless the paragraph below has been checked to indicate to the contrary, A FORMAL WRITTEN RESPONSE TO THE LAST OFFICE ACTION IS NOT WAIVED AND MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW (e.g., items 1-7 on the reverse side of this form). If a response to the last Office action has already been filed, then applicant is given one month from this interview date to provide a statement of the substance of the interview.

☒ 2. Since the examiner's interview summary above (including any attachments) reflects a complete response to each of the objections, rejections and requirements that may be present in the last Office action, and since the claims are now allowable, this completed form is considered to fulfill the response requirements of the last Office action. Applicant is not relieved from providing a separate record of the substance of the interview unless box 1 above is also checked.



UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

| SERIAL NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. |
|---------------|-------------|-----------------------|---------------------|
| 08/295,495 | 08/25/94 | MCDONALD | S 920015 |

WERNER, F EXAMINER

F1M1/0307

LYNN J. ALSTADT
BUCHANAN INGERSOLL
500 GRANT STREET, 56TH FLOOR
PITTSBURGH, PA 15219

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 3107 | 16 |

03/07/95

DATE MAILED:

NOTICE OF ALLOWABILITY

PART I

1. ☒ This communication is responsive to the amendment of
2. ☒ All the claims being allowable, PROSECUTION ON THE MERITS IS ~~(OR REMAINS)~~ CLOSED in this application. If not included herewith (or previously mailed), a Notice Of Allowance And Issue Fee Due or other appropriate communication will be sent in due course.
3. ☒ The allowed claims are 1-3, 5-17, 19-23 and 36
4. ☐ The drawings filed on _____ are acceptable.
5. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has [...] been received. [...] not been received. [...] been filed in parent application Serial No. _____, filed on _____
6. ☐ Note the attached Examiner's Amendment.
7. ☒ Note the attached Examiner Interview Summary Record, PTOL-413.
8. ☐ Note the attached Examiner's Statement of Reasons for Allowance.
9. ☐ Note the attached NOTICE OF REFERENCES CITED, PTO-892.
10. ☐ Note the attached INFORMATION DISCLOSURE CITATION, PTO-1449.

PART II. The claims have been allowed because the prior art does not disclose or teach the need for a storage area with packages (as claimed), a computer (as claimed), and a method of operating in the claimed manner.
A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" indicated on this form. Failure to timely comply will result in the ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

1. ☐ Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
2. ☒ APPLICANT MUST MAKE THE DRAWING CHANGES INDICATED BELOW IN THE MANNER SET FORTH ON THE REVERSE SIDE OF THIS PAPER.
 - a. ☒ Drawing informalities are indicated on the NOTICE RE PATENT DRAWINGS, PTO-948, attached hereto or to Paper No. 5. CORRECTION IS REQUIRED.
 - b. ☐ The proposed drawing correction filed on _____ has been approved by the examiner. CORRECTION IS REQUIRED.
 - c. ☐ Approved drawing corrections are described by the examiner in the attached EXAMINER'S AMENDMENT. CORRECTION IS REQUIRED.
 - d. ☒ Formal drawings are now REQUIRED.

Any response to this letter should include in the upper right hand corner, the following information from the NOTICE OF ALLOWANCE AND ISSUE FEE DUE: ISSUE BATCH NUMBER, DATE OF THE NOTICE OF ALLOWANCE, AND SERIAL NUMBER.

Attachments:

- Examiner's Amendment
- ☒ Examiner Interview Summary Record, PTOL-413
- Reasons for Allowance
- Notice of References Cited, PTO-892
- Information Disclosure Citation, PTO-1449

- Notice of Informal Application, PTO-152
- Notice re Patent Drawings, PTO-948
- Listing of Bonded Draftsmen
- Other

FRANK E. WERNER
PRIMARY EXAMINER 3/1/95
GROUP 3100



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: Box ISSUE FEE
COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

F1M1/0007

LYNN J. ALSTADT
BUCHANAN INGERSOLL
600 GRANT STREET, 56TH FLOOR
PITTSBURGH, PA 15219

**NOTICE OF ALLOWANCE
AND ISSUE FEE DUE**

☐ Note attached communication from the Examiner

☐ This notice is issued in view of applicant's communication filed

| SERIES CODE/SERIAL NO. | FILING DATE | TOTAL CLAIMS | EXAMINER AND GROUP ART UNIT | DATE MAILED |
|------------------------|-------------------|--------------|-----------------------------|-------------|
| 08/208,495 | 08/19/94 | 022 | WERNER, F | 03/07/95 |
| First Named Applicant | REYNOLDS, SEAN C. | | | |

TITLE OF
INVENTION

AUTOMATED SYSTEM FOR SELECTING PACKAGES FROM A STORAGE AREA

| ATTY'S DOCKET NO. | CLASS-SUBCLASS | BATCH NO. | APPLN. TYPE | SMALL ENTITY | FEE DUE | DATE DUE |
|-------------------|----------------|-----------|-------------|--------------|----------|----------|
| 9 920015 | 414-273.000 | 050 | UTILITY | YES | \$605.00 | 06/07/95 |

**THE APPLICATION IDENTIFIES ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT.
PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS
APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

HOW TO RESPOND TO THIS NOTICE:

I. Review the SMALL ENTITY Status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the patent and Trademark Office of the change in status, or
- B. If the Status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, pay of 1/2 the FEE DUE shown above.

II. Part B of this notice should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B should be completed and returned. If you are charging the ISSUE FEE to your deposit account, Part C of this notice should also be completed and returned.

III. All communications regarding this application must give series code (or filing date), serial number and batch number. Please direct all communication prior to issuance to Box ISSUE FEE unless advised to contrary.

IMPORTANT REMINDER: Patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

00 416



#18
3107

SEP - 1 1995
CHIEF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 3107 : PATENT
Examiner F. Werner :
In re application of :
SEAN MCDONALD ET AL. : AUTOMATED SYSTEM FOR
Serial No. 08/295,495 : SELECTING PACKAGES FROM
Filed August 25, 1994 : A STORAGE AREA
Allowed March 7, 1995 :

4/100

LETTER

Pittsburgh, Pennsylvania 15219

August 21, 1995

Hon. Commissioner of Patents and Trademarks

Washington, D. C. 20231

Attention: Brenda Moore - Drawing Processing Branch

Sir:

This is in response to the Notice of Outstanding Drawing Requirement of August 16, 1995 indicating that the requirement for formal drawings (Form PTOL-37) attached to the official Notice of Allowance of March 7, 1995 has not been satisfied.

We are enclosing herewith a copy of our letter of April 25, 1995 enclosing seven (7) sheets of formal drawings and

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage paid, at the United States Patent and Trademark Office, Washington, D.C. 20231, on 8/21/95.

[Signature]

a copy of the postcard received and stamped by the Mail Room on April 27, 1995.

In view of the fact that the drawings were obviously misplaced or lost by the Patent and Trademark Office, we are enclosing herewith the seven (7) sheets of formal drawings containing Figures 8 thru 10 and 16 thru 19 for entry into the above-entitled application.

Please substitute these drawings for the drawings originally filed with the application. A copy of the Notice of Draftsperson's Patent Drawing Review (Form 948) is also enclosed which objects to the original drawings filed with the application. These drawings overcome the objections.

Entry of the formal drawings is respectfully requested.

Respectfully submitted,



Lynn J. Alstadt
Registration No. 29,362
BUCHANAN INGERSOLL, P.C.
600 Grant Street, 56th Floor
Pittsburgh, PA 15219
(412) 562-1632

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 3107 : PATENT
Examiner F. Werner :
In re application of : AUTOMATED SYSTEM FOR
SEAN MCDONALD et al. : SELECTING PACKAGES FROM
Serial No. 08/295,495 : A STORAGE AREA
Filed August 25, 1994 :
Allowed March 7, 1995 :

LETTER

Pittsburgh, Pennsylvania 15219

April 25, 1995

Hon. Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

Enclosed herewith are seven sheets of formal drawings containing Figures 8 thru 10 and 16 thru 19 for entry into the above-titled application. Please substitute these drawings for the drawings originally filed with the application. A copy of the Notice of Draftperson's Patent Drawing Review (Form 948) is also enclosed which objects to the original drawings filed with the application. These drawings overcome the objections.

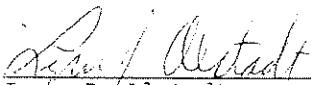
I hereby certify that this correspondence is being
sent to the inventor or applicant, or to the
attorney or agent of record, at the address
of the inventor or applicant, or to the attorney
or agent of record, as the case may be.

APR 25 1995
F. Werner

Entry of the formal drawings is respectfully requested.

Respectfully submitted,

BUCHANAN INGERSOLL, P.C.

By 
Lynn J. Alstadt
Registration No. 29,362

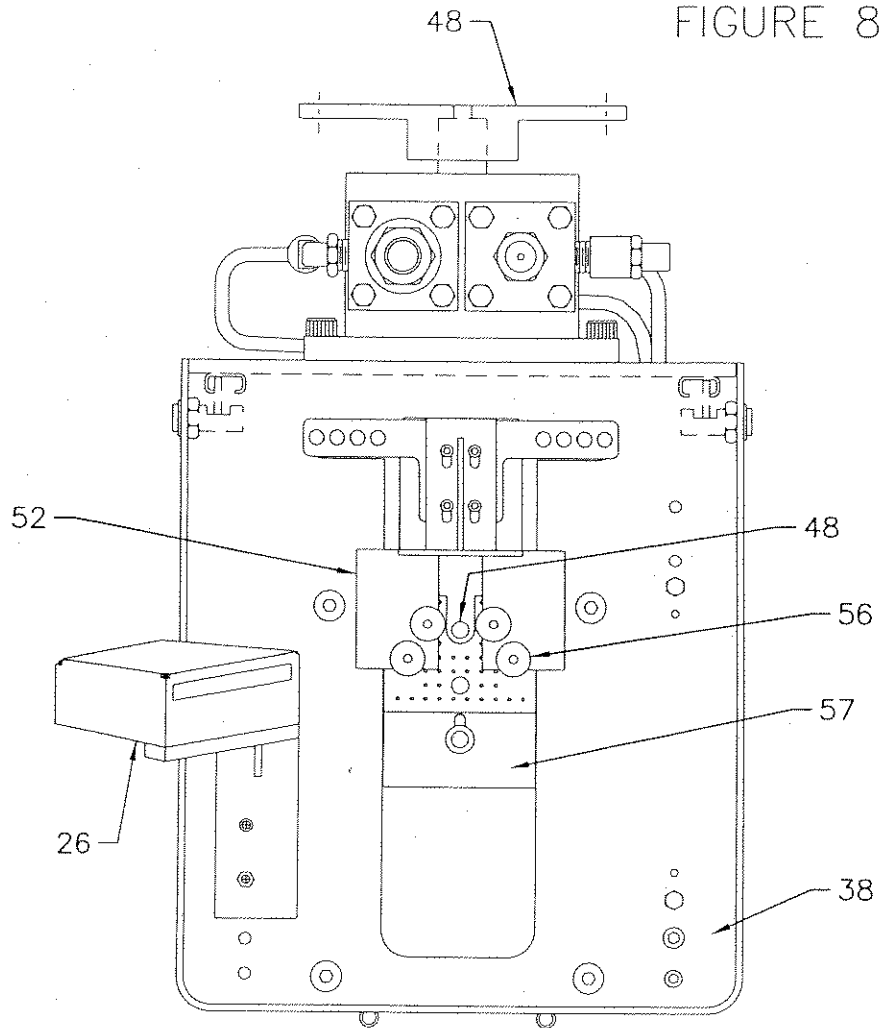
Attorneys for Applicants

(412) 562-1632

| | | |
|-----------|-----------|----------|
| APPROVED | D.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

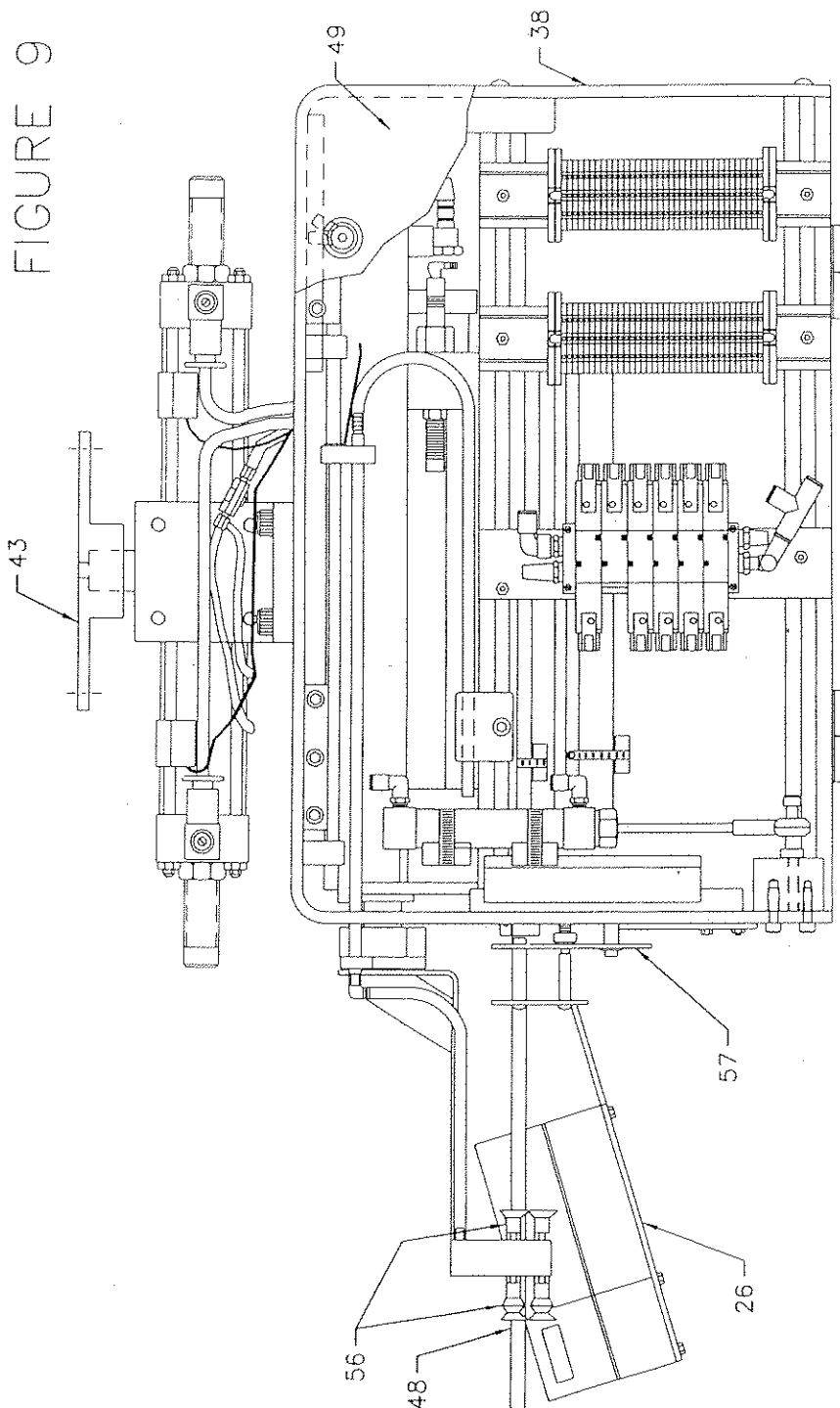
295495

FIGURE 8



| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

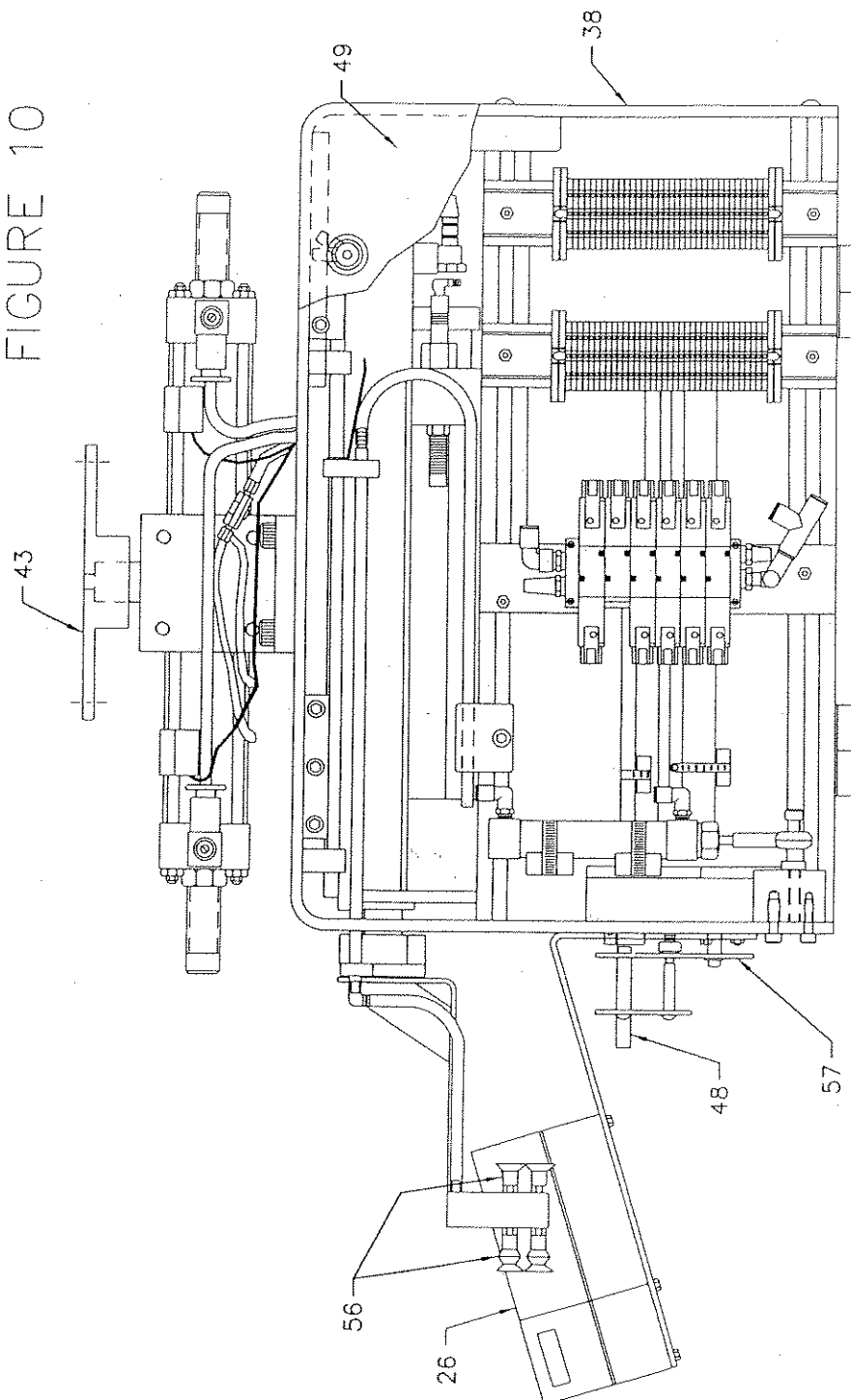
295495



| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

295495

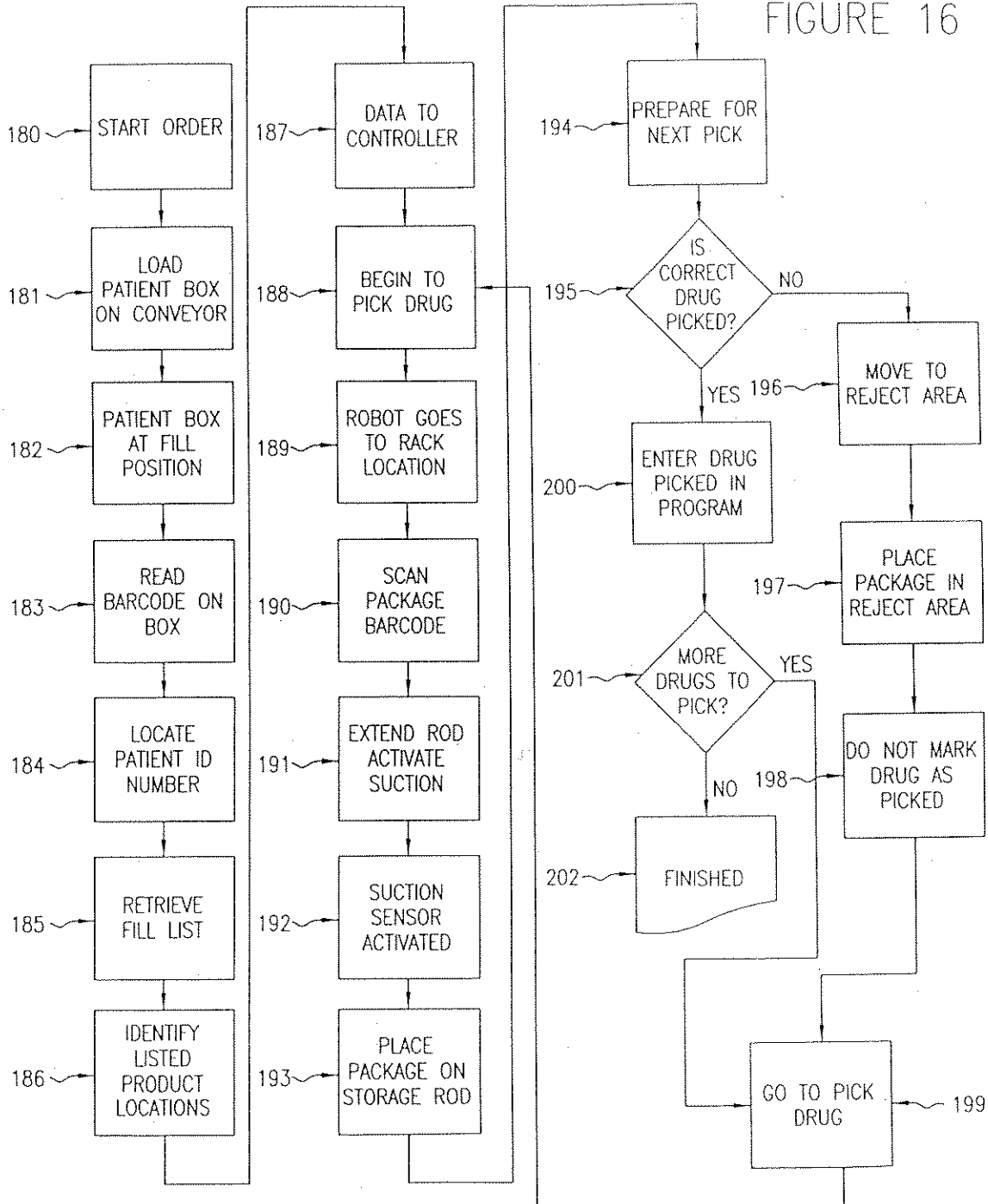
FIGURE 10



| | | |
|----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DIVISION | | |

295495

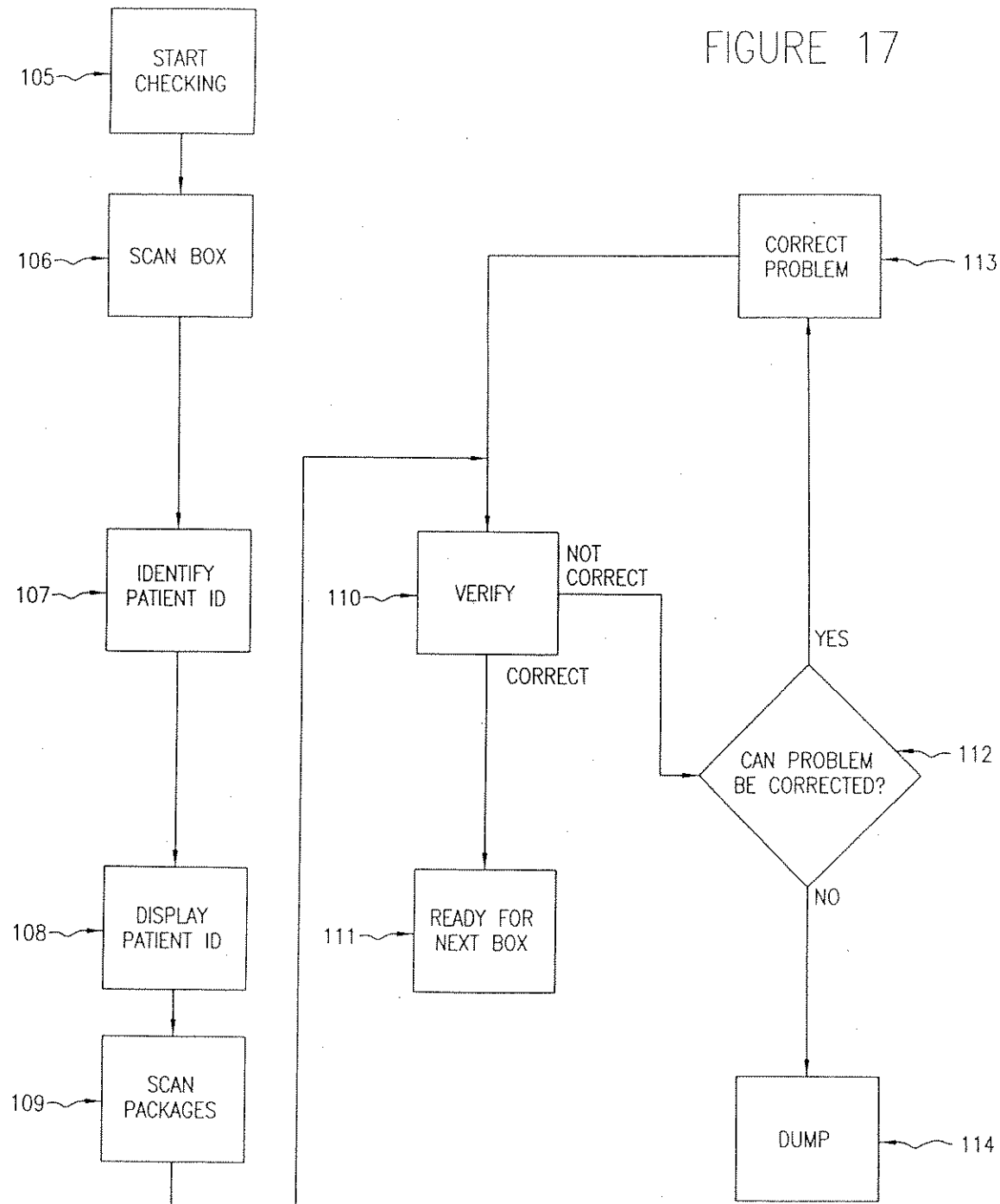
FIGURE 16



| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

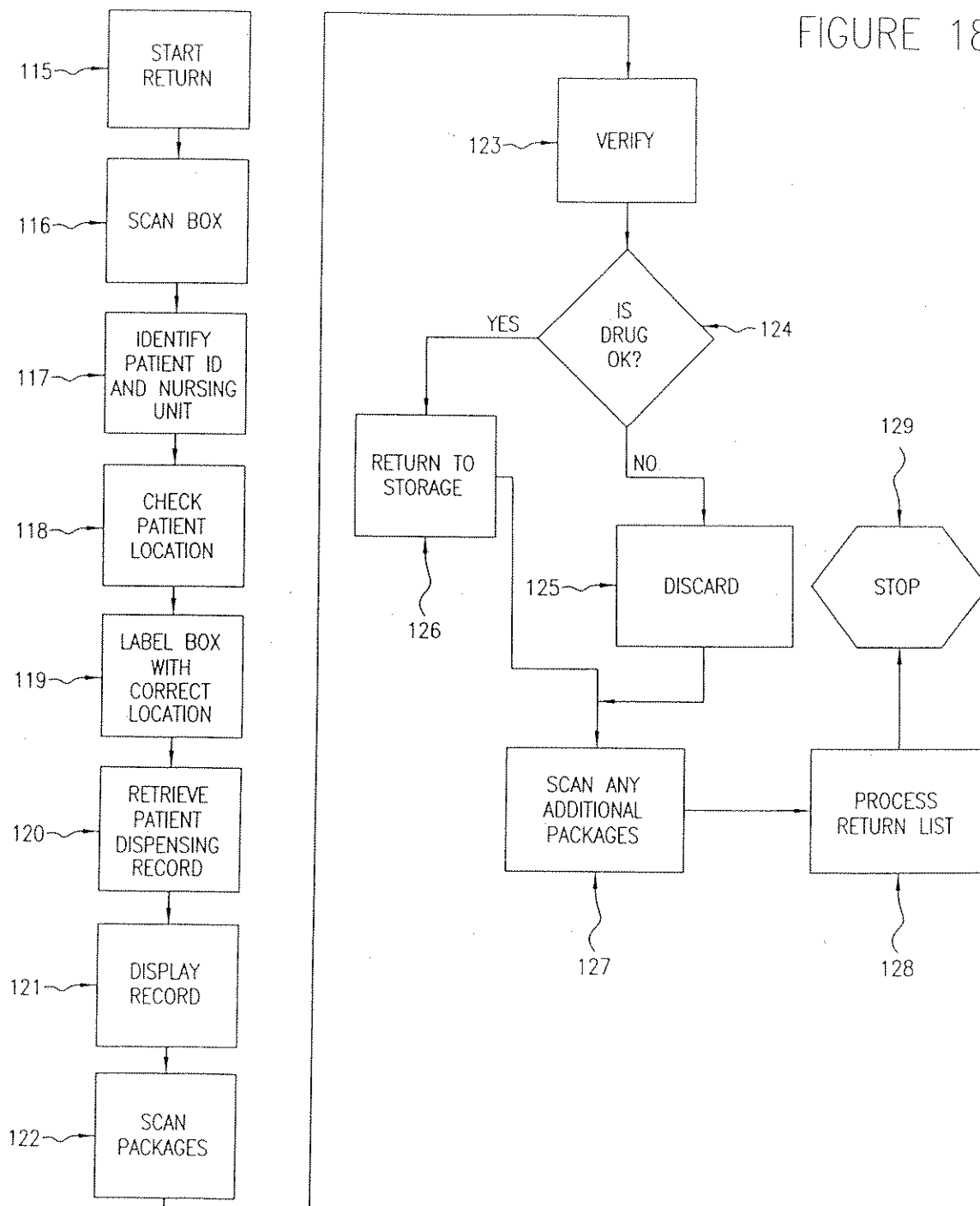
295495

FIGURE 17



| | | |
|-----------|-----------|------------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASSES |
| DRAFTSMAN | | |

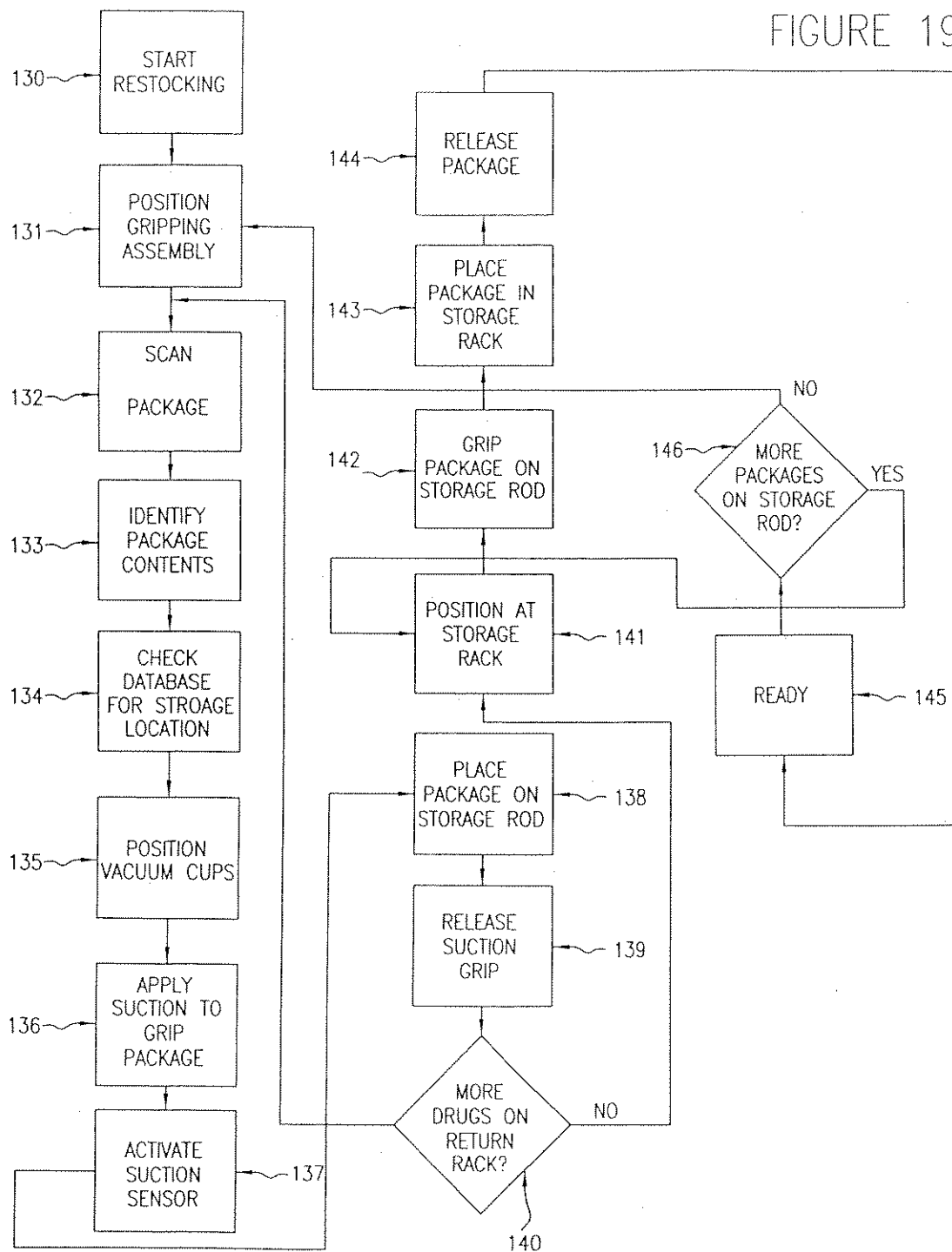
295995



| | | |
|-----------|-----------|----------|
| APPROVED | D.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

295495

FIGURE 19



The dating stamp of
the Patent Office on this
card will be taken as an
indication that the accom-
panying paper was filed.

Applicant(s) McDonald et al

Ser. No. 08/295,495

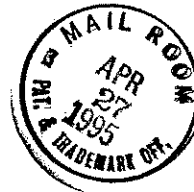
Paper dated April 25, 1995

Atty's File No. 940688/1ja

Letter

7 sheets of formal
drawings

A copy of draft-
person's patent
drawing review



PTO FORM 948
(Rev. 5-81)U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

ATTACHMENT TO PAPER NUMBER

5

APPLICATION NUMBER

021823

GROUP 3107

NOTICE OF DRAFTSMAN'S PATENT DRAWING REVIEW

The PTO Draftsmen review all originally filed drawings regardless of whether they were designated as informal or formal.

The drawings filed 9/21/02A. ☐ are approved.B. ☒ are objected to under 37 CFR 1.84 for reason(s) checked below. The examiner will require submission of new, corrected drawings at the appropriate time. Corrected drawings must be submitted according to the instructions listed on the back of this Notice.

1. Paper and Ink. 37 CFR 1.84(a)

- ☐ Poor Quality Paper. Must Be White.
Transparent Paper Not Allowed.
Sheet(s) _____

2. Size of Sheet and Margins. 37 CFR 1.84(b)
Acceptable Paper Sizes and Margins

| Paper Size | | | |
|------------|--------------------|--------------------|---------------------------|
| Margin | 8 1/2 by 14 inches | 6 1/2 by 13 inches | DIN size A4 21 by 29.7 cm |
| Top | 2 inches | 1 inch | 2.5 cm. |
| Left | 1/4 inch | 1/4 inch | 2.5 cm. |
| Right | 1/4 inch | 1/4 inch | 1.5 cm. |
| Bottom | 1/4 inch | 1/4 inch | 1.0 cm. |

- ☐ Proper Size Paper Required. All Sheets Must be Same Size.
Sheet(s) _____

☐ Proper Margins Required.
Sheet(s) _____

- ☐ Top ☐ Right
☐ Left ☐ Bottom

3. Character of Lines. 37 CFR 1.84(c)

- ☐ Lines Pale, Rough and Blurred, or Jagged. Fig(s) _____
- ☐ Solid Black Shading Not Allowed.
Fig(s) _____

4. ☐ Photographs Not Approved.☒ Comments:

- Remove box from drawing page figs 8-10

5. Hatching and Shading. 37 CFR 1.84(d)

- ☐ Shade Lines are Required.
Fig(s) _____
- ☐ Criss-Cross Hatching Not Allowed.
Fig(s) _____
- ☐ Double Line Hatching Not Allowed.
Fig(s) _____
- ☐ Parts in Section Must be Hatched Properly. Fig(s) _____

6. Reference Characters. 37 CFR 1.84(f)

- ☐ Reference Characters Poor or Rough and Blurred. Fig(s) _____
- ☐ Minimum 1/8 inch (3.2 mm.) in height is required. Fig(s) 8-10, 16-17
- ☐ Figure Legends Poor or Placed Incorrectly. Fig(s) 12 15

7. Views. 37 CFR 1.84(i) & (j)

- ☐ Figures Must be Numbered Separately.

- ☐ Figures Must Not be Connected
Fig(s) _____

8. Identification of Drawings. 37 CFR 1.84(l)

- ☐ Extraneous Matter or Copy Machine Marks Not Allowed. Fig(s) _____

9. ☐ Changes Not Completed from Prior PTO-948 dated _____

Telephone inquiries concerning this review should be directed to the Chief Draftsman at telephone number (703) 607-6404

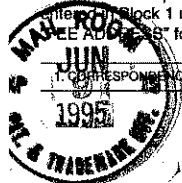
Reviewing Draftsman_____
Date

Applicant's Copy

605-242

PART B—ISSUE FEE TRANSMITTAL

MAILING INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE. Blocks 2 through 6 should be completed where appropriate. All further correspondence including the Issue Fee Receipt, the Patent, advance orders and notification of maintenance fees will be mailed to addressee in Block 1 unless you direct otherwise, by: (a) specifying a new correspondence address in Block 3 below; or (b) providing the PTO with a separate "SEE ADDRESS" for maintenance fee notifications with the payment of Issue Fee or thereafter. See reverse for Certificate of Mailing.



| | | | |
|---------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1. CORRESPONDENCE ADDRESS LYNN J. ALSTADT BUCHANAN INGERSOLL 600 GRANT STREET, 56TH FLOOR PITTSBURGH, PA 15219 | | 2. INVENTOR(S) ADDRESS CHANGE (Complete only if there is a change) INVENTOR'S NAME Street Address City, State and ZIP Code CO-INVENTOR'S NAME Street Address City, State and ZIP Code <input type="checkbox"/> Check if additional changes are on reverse side | |
|---------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

| SERIES CODE/SERIAL NO. | FILING DATE | TOTAL CLAIMS | EXAMINER AND GROUP ART UNIT | DATE MAILED |
|------------------------------------------|-------------|--------------|-----------------------------|-------------|
| 08/295,455 | 08/25/94 | 022 | WERNER, F 3107 | 03/07/95 |
| First Named Applicant: MCDONALD, SEAN C. | | | | |

TITLE OF INVENTION AUTOMATED SYSTEM FOR SELECTING PACKAGES FROM A STORAGE AREA

| ATTY'S DOCKET NO. | CLASS-SUBCLASS | BATCH NO. | APPLN. TYPE | SMALL ENTITY | FEE DUE | DATE DUE |
|-------------------|----------------|-----------|-------------|--------------|----------|----------|
| 3 920015 | 414-273.000 | J50 | UTILITY | YES | \$605.00 | 06/07/95 |

| | |
|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3. Correspondence address change (Complete only if there is a change) | 4. For printing on the patent front page , list the names of not more than 3 registered patent attorneys or agents OR, alternatively, the name of a firm having as a member a registered attorney or agent. If no name is listed, no name will be printed. |
| | 1 <u>Buchanan Ingersoll</u> 2 <u>Lynn J. Alstadt</u> 3 _____ |

DO NOT USE THIS SPACE

160 KJ 07/06/95 08295495

1 242 605.00 CK

5. ASSIGNMENT DATA TO BE PRINTED ON THE PATENT (print or type)

(1) NAME OF ASSIGNEE:
Automated Healthcare, Inc.
(2) ADDRESS: (CITY & STATE OR COUNTRY)
Pittsburgh, PA

- A. ☐ This application is NOT assigned.
☒ Assignment previously submitted to the Patent and Trademark Office.
☐ Assignment is being submitted under separate cover. Assignments should be directed to Box ASSIGNMENTS.

PLEASE NOTE: Unless an assignee is identified in Block 5, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the PTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

- 5a. The following fees are enclosed:
☒ Issue Fee ☐ Advance Order - # of Copies _____
 5b. The following fees should be charged to:
 DEPOSIT ACCOUNT NUMBER 02-4553
 (ENCLOSE PART C)
☐ Issue Fee ☐ Advance Order - # of Copies _____
☒ Any Deficiencies in Enclosed Fees

The COMMISSIONER OF PATENTS AND TRADEMARKS is requested to apply the Issue Fee to the application identified above.

(Authorized Signature) Lynn J. Alstadt (Date) 6/7/95
 NOTE: The Issue Fee will not be accepted from anyone other than the applicant, a registered attorney or agent, or the assignee or other party in interest as shown by the records of the Patent and Trademark Office.

TRANSMIT THIS FORM WITH FEE-CERTIFICATE OF MAILING ON REVERSE

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Box ISSUE FEE
Commissioner of Patents and Trademarks
Washington, D.C. 20231

on June 7, 1995

(Date)

Vicki Cremonese

(Name of person making deposit)

(Signature)

(Date)

Note: If this certificate of mailing is used, it can only be used to transmit the Issue Fee. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing.

Burden Hour Statement: This form is estimated to take .2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Office of Information Systems, Patent and Trademark Office, Washington, D.C. 20231, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, (Project 0651-0033), Washington, D.C. 20503. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents and Trademarks, Box Issue Fee, Washington, DC 20231.

**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**Address : COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

| SERIAL NUMBER | FILING DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NO. |
|---------------|-------------|-----------------------|---------------------|
| 08/295,495 | 08/25/94 | MCDONALD | S 920015 |

LYNN J. ALSTADT
BUCHANAN INGERSOLL
600 GRANT STREET, 56TH FLOOR
PITTSBURGH, PA 15219

4102/0816

| NET/NET EXAMINER | |
|------------------|--------------|
| ART UNIT | PAPER NUMBER |
| 3107 | 17 |

DATE MAILED:

08/16/95

NOTICE OF OUTSTANDING DRAWING REQUIREMENT

Office records indicate that the requirement for

- ☒ formal drawings
☐ drawing corrections
☐

which was made in the form PTOL-37

- ☒ attached to the Notice of Allowance and Issue Fee Due mailed 3/7/95
☐ mailed _____

has not been satisfied. As set forth in the form PTOL-37 and form PTO-1474, required drawing corrections must have been made by a bonded draftsman or new drawings submitted during the three month statutory period set for payment of the issue fee. The *three* month period for payment of the issue fee is a statutory requirement (35 USC 151) and cannot be extended. However, drawing corrections and new formal drawings will be accepted as timely filed through the end of a *six* month statutory period (35 USC 133), provided a request for extension of time and the correct fee in accordance with 37 CFR 1.136(a) is submitted before the end of the six month period. The required fees are set forth in 37 CFR 1.17(a), (b), and (c). If the requirements are not satisfied within the statutory period, this application will be abandoned.

Brenda Moore
Drawing Processing Branch
703-305-8428

Drafting Branch
Office of Publications

PTO UTILITY GRANT

Paper Number 19

The
United
States
of
America

The Commissioner of Patents
and Trademarks

*Has received an application for a patent
for a new and useful invention. The title
and description of the invention are en-
closed. The requirements of law have
been complied with, and it has been de-
termined that a patent on the invention
shall be granted under the law.*

Therefore, this

United States Patent

*Grants to the person or persons having
title to this patent the right to exclude
others from making, using or selling the
invention throughout the United States
of America for the term of seventeen
years from the date of this patent, sub-
ject to the payment of maintenance fees
as provided by law.*



Bence Lehman

Commissioner of Patents and Trademarks

Pandra Z. Morton
Attest

PTO-1584



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit 3107

: PATENT APPLICATION

In re application of

:

SEAN C. MCDONALD ET AL.

: AUTOMATED SYSTEM FOR
SELECTING PACKAGES FROM
: A STORAGE AREA

Serial No. 295,495

Filed August 25, 1994

:

Patent No. 5,468,110

:

Issued November 21, 1995

:

LETTERPittsburgh, Pennsylvania 15219
January 8, 1996Hon. Commissioner of Patents and Trademarks
Washington, D. C. 20231

Sir:

Applicant requests that a Certificate of Correction be issued to correct the errors which are indicated on the attached form for Certificate of Correction.

Respectfully submitted,

APPROVED

MAR 19 1996

Mary J. Alstadt
MAR 19 1996
MAR 19 1996*Lynn J. Alstadt*
Lynn J. Alstadt
Registration No. 29,362
BUCHANAN INGERSOLL, P.C.
One Oxford Centre
301 Grant Street, 20th Floor
Pittsburgh, PA 15219
(412) 562-1632RECEIVED
FEB - 8 95
DEPT. OF COMMERCE
PATENT BRANCH

Staple
Here
Only !

PRINTER'S TRIM LINE

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 5,468,110

DATED : November 21, 1995

INVENTOR(S) : SEAN C. McDONALD, ELLEN J. HERTZ, JAMES A. SMITH, GREGORY TOTO

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1, line 6, change "07/87/832" to --07/871,832--.

Column 14, lines 47-48, claim 20, delete "[on either the first or".

MAILING ADDRESS OF SENDER: Lynn J. Alstadt
BUCHANAN INGERSOLL, P.C.
301 Grant Street, 20th Floor
Pittsburgh, PA 15219

PATENT NO. 5,468,110

No. of add'l copies
@ 50¢ per page



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 5,468,110

DATED : November 21, 1995

INVENTOR(S) : SEAN C. McDONALD, ELLEN J. HERTZ, JAMES A. SMITH, GREGORY TOTO

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 1, line 6, change "07/87/832" to --07/871,832--.

Column 14, lines 47-48, claim 20, delete "[on either the first or".

Signed and Sealed this
Sixteenth Day of April, 1996



BRUCE LEHMAN

Attest:

Attesting Officer

Commissioner of Patents and Trademarks

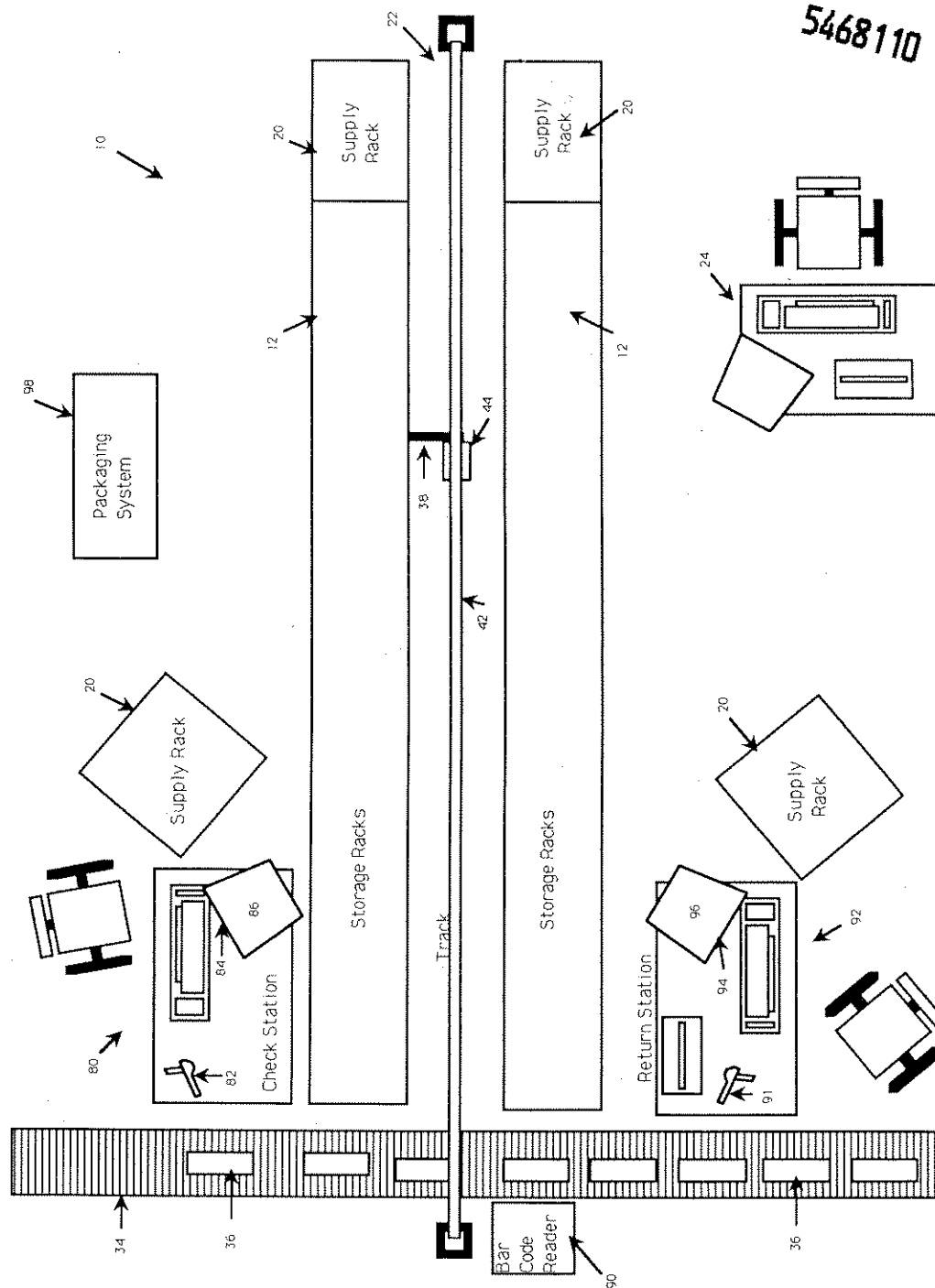
| PATENT APPLICATION FEE DETERMINATION RECORD | | | | | | Application or Docket Number 295 495 | |
|--------------------------------------------------------------------------|----------------------------------|------------------------------------|---------------|------------|----------------|--------------------------------------------------------------------------------|----------|
| Effective October 1, 1992 | | | | | | | |
| CLAIMS AS FILED - PART I | | | | | | SMALL ENTITY OR OTHER THAN SMALL ENTITY | |
| (Column 1) | | (Column 2) | | (Column 3) | | (Column 4) | |
| FOR | NUMBER FILED | NUMBER EXTRA | RATE | FEE | OR | RATE | FEE |
| BASIC FEE | | | | \$355.00 | OR | | \$710.00 |
| TOTAL CLAIMS | 24 | minus 20 = 4 | x\$11= | 44 | OR | x\$22= | |
| INDEPENDENT CLAIMS | 2 | minus 3 = * | x 37= | | OR | x 74= | |
| MULTIPLE DEPENDENT CLAIM PRESENT | | | +115= | | OR | +230= | |
| | | | TOTAL | 399 | OR | TOTAL | |
| * If the difference in column 1 is less than zero, enter "0" in column 2 | | | | | | | |
| CLAIMS AS AMENDED - PART II | | | | | | SMALL ENTITY OR OTHER THAN SMALL ENTITY | |
| (Column 1) | | (Column 2) | | (Column 3) | | (Column 4) | |
| AMENDMENT | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE | ADDITIONAL FEE | OR | RATE |
| Total | 22 | Minus | 24 | x\$11= | | OR | x\$22= |
| Independent | 1 | Minus | 3 | x 37= | | OR | x 74= |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM | | | + 115= | | OR | +230= | |
| | | | TOTAL | | OR | TOTAL | |
| | | | ADDIT. FEE | | OR | ADDIT. FEE | |
| AMENDMENT B | | | | | | SMALL ENTITY OR OTHER THAN SMALL ENTITY | |
| (Column 1) | | (Column 2) | | (Column 3) | | (Column 4) | |
| Total | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE | ADDITIONAL FEE | OR | RATE |
| Independent | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | x\$11= | | OR | x\$22= |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | x 37= | | OR | x 74= |
| | | | + 115= | | OR | + 230= | |
| | | | TOTAL | | OR | TOTAL | |
| | | | ADDIT. FEE | | OR | ADDIT. FEE | |
| AMENDMENT C | | | | | | SMALL ENTITY OR OTHER THAN SMALL ENTITY | |
| (Column 1) | | (Column 2) | | (Column 3) | | (Column 4) | |
| Total | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE | ADDITIONAL FEE | OR | RATE |
| Independent | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | x\$11= | | OR | x\$22= |
| FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM | CLAIMS REMAINING AFTER AMENDMENT | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | x 37= | | OR | x 74= |
| | | | + 115= | | OR | + 230= | |
| | | | TOTAL | | OR | TOTAL | |
| | | | ADDIT. FEE | | OR | ADDIT. FEE | |

☆ U.S.G.P.O.: 1994 - 365-974

| | | |
|------------|-------------|----------|
| APPROVED | O.G. FIG. 6 | |
| BY | CLASS | SUBCLASS |
| TECHNICIAN | 414 | 873 |

295495

5468110



| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

295495

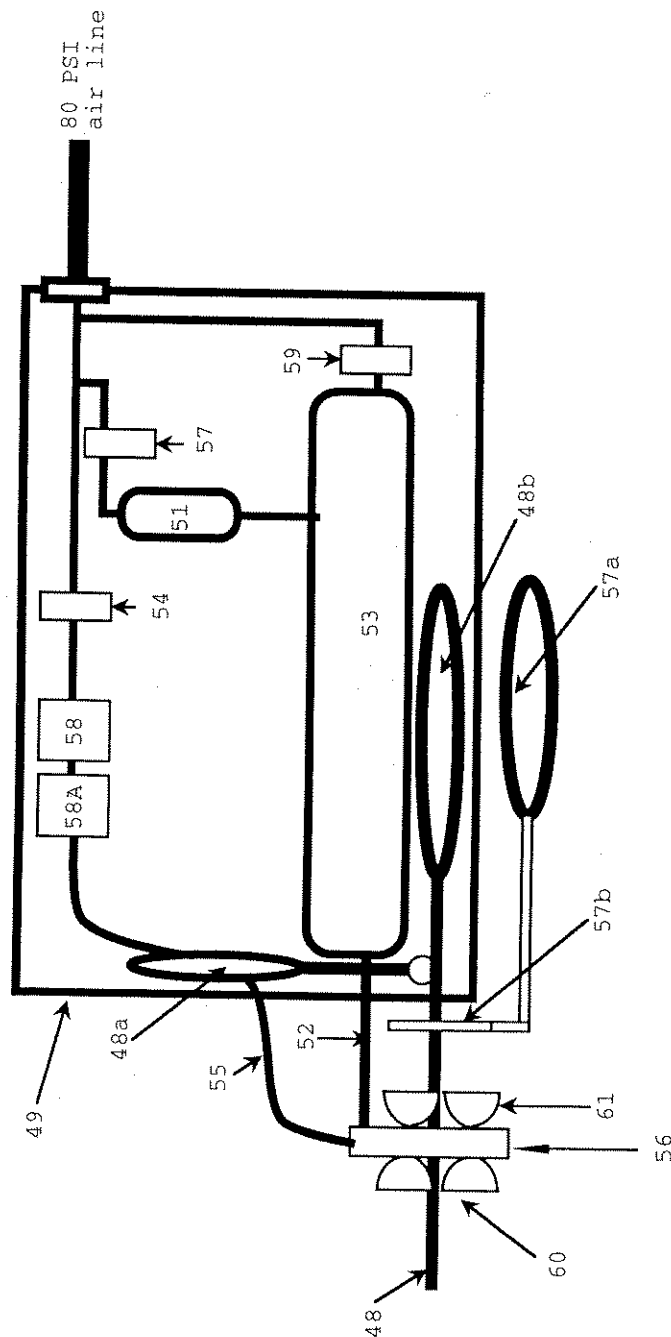


Figure 11

| | | |
|-----------|-----------|----------|
| APPROVED | O.G. FIG. | |
| BY | CLASS | SUBCLASS |
| DRAFTSMAN | | |

295495

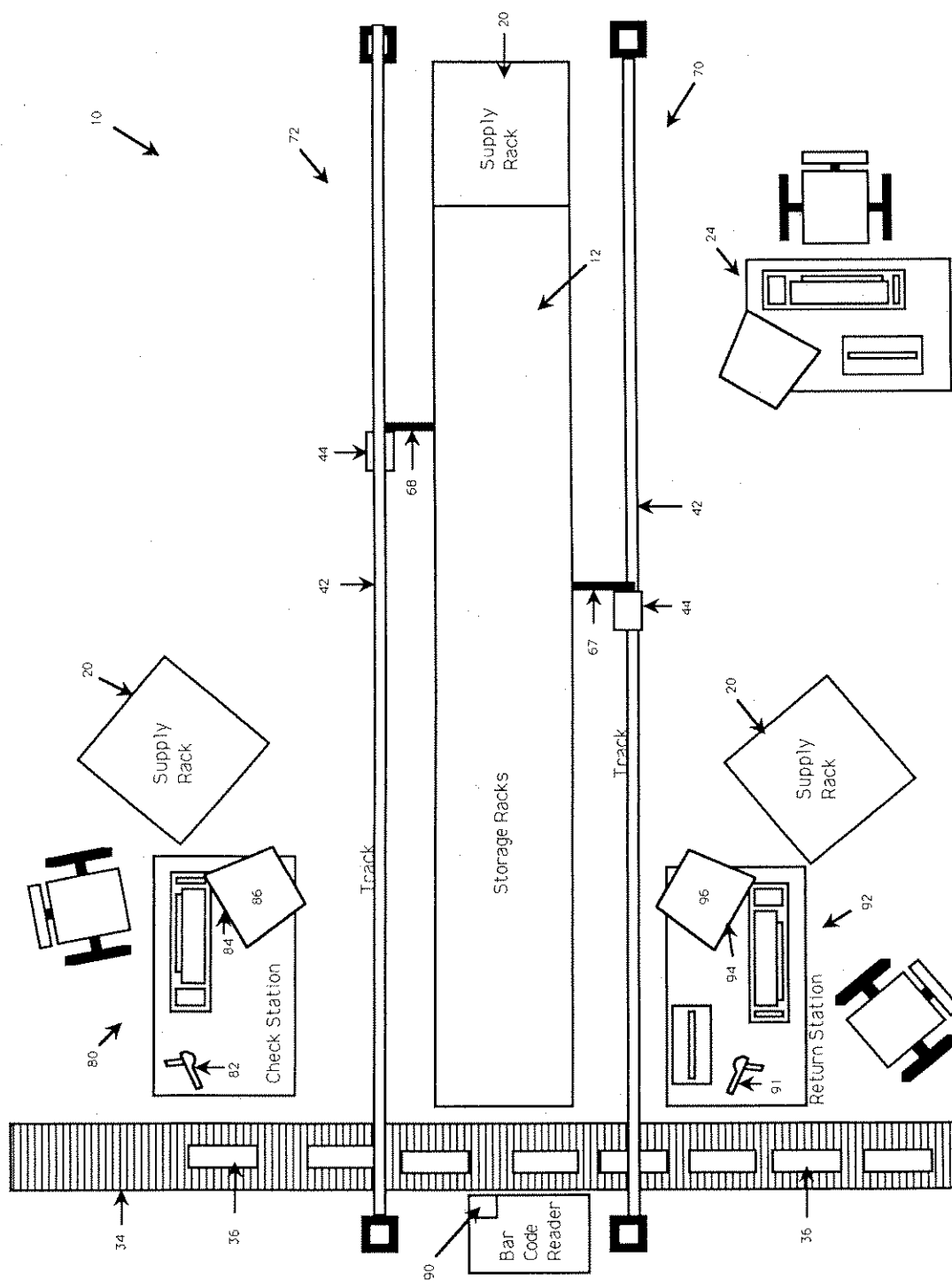


Figure 15